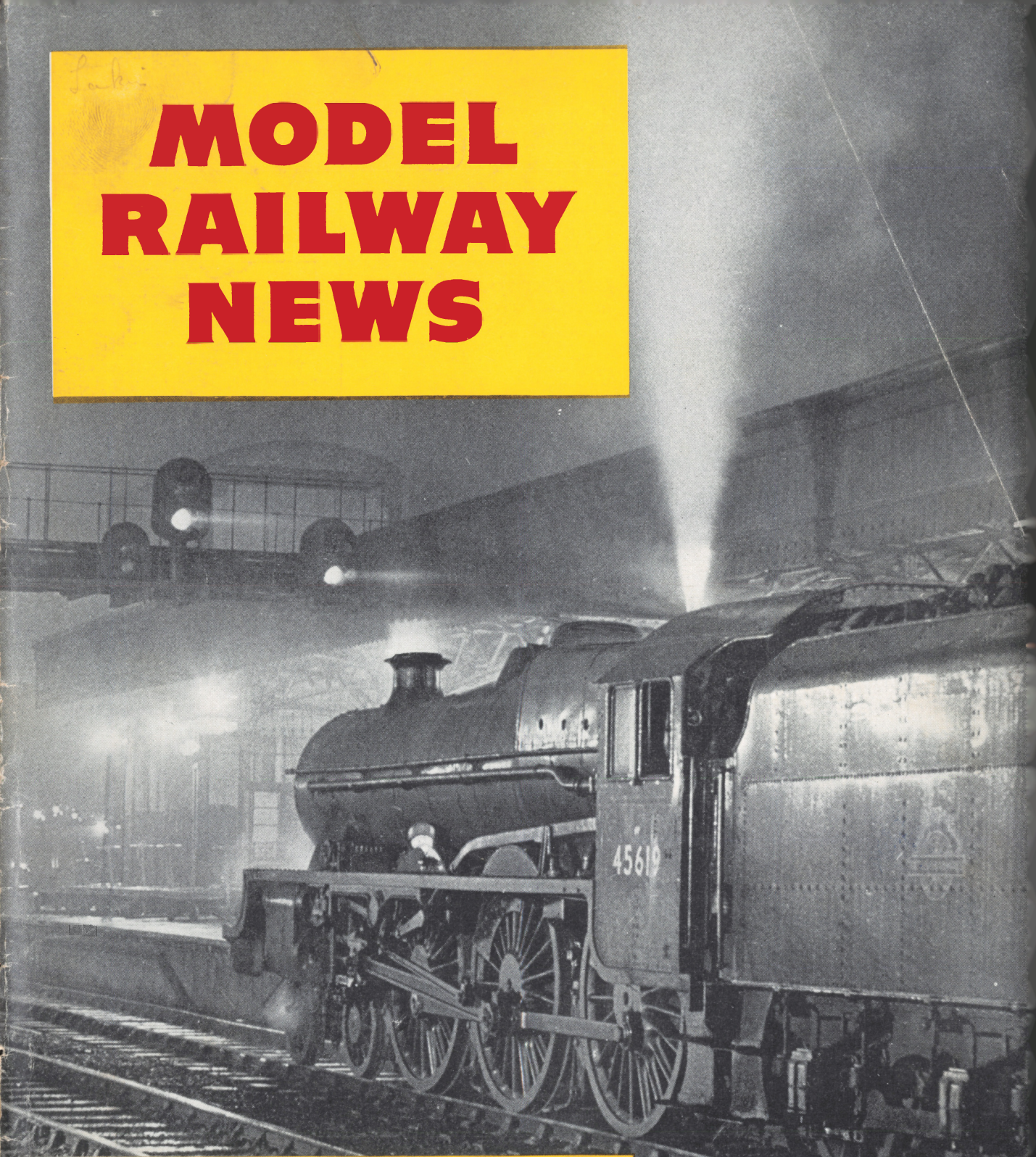
MODEL RAILWAY NEWS



Contents include...

LOCOMOTIVE MAIN FRAMES · G&S.W.R. POSTAL SORTING VAN · BUILDING COACHES FROM CARD

and All the regular M.R.N. features

1'6

AUGUST 1956

SPECIAL OFFER OF MASTER MODEL SCALE HOUSES

These fascinating, colourful models are offered at about half price to clear.

4/6 each (post 6d.) 6 for **25/-** (post free)

BILTEEZI SHEETS

1/10 each (post 4d.)

A 1 House
2 Garage
3 Church
4 Public-house
5 School
6 Accessories
B 1 Country station
2 Factory
3 Loco shed
4 Platforms
5 Signal boxes
6 Tunnels
C 1 Coaling stage
2 Oil and water tanks
3 Goods shed
D 1 Cottages
2 Farm buildings
3 Large barn
4 Tudor inn
5 Tudor shops
6 Tudor buildings
E 1 Suburban houses
2 Bungalow
3 Block of flats

LAY SPIKED TRACK

Spiked track is fascinating to lay, It curves and joins easily and once laid is very strong, yet it can be relaid without trouble. Take pride in your skill as a platelayer and lay spiked track !

PECO SPIKED TRACK KITS

Universal 2-rail **9/-**
Universal 3-rail **11/3**
Spikes **2/5**, sleepers **2/6**, rail **5/5**
All Peco products stocked

STICK IT WITH "CLAM"

"Clam" is the modeller's adhesive. It sticks slowly but grips tightly and it is clean. Use "Clam" for wood, cloth, paper, etc.
Polythene bottle, **3/9** (post 4d.)

WRENN UNIVERSAL TRACK

Track	2-rail	**4/8**	3-rail	**6/2**
Points	,,	**10/6**	,,	**12/3**
Diamond	,,	**11/8**	,,	**13/7**
Crossover ...	,,	**35/8**	,,	**28/7**
Double junctions	,,	**36/4**	,,	**39/11**
Terminal rail ...	,,	**1/11**	,,	**2/1**

Buffer stops **2/6**, fishplates **4/3**, screws **2/6**, point levers **1/9**, ballast strip (6 ft.) **1/-**

TRACK-LAYING TOOLS

Junior hack-saw **1/6**, blades **5d.**, razor saws **2/-** (¾ in.), **2/6** (1 in.), with X-Acto handle set **10/6.**

TIP-TOP SECONDHAND TRACK

Our prices for secondhand track and equipment will not be increased before January, 1957. Every item is guaranteed to give satisfaction or money refunded. Send for our bargain list.

BEATTIES' BETTER BASEBOARDS

We have produced some useful notes on the making of baseboards in general and our unit baseboards in particular. Bad baseboards cause most track troubles, and these notes will be sent to anyone interested who sends 4d. postage.

CONVERT TO FLEXIBLE

Flexible track looks better and trains run better on it. It is cheaper and you can convert your Trix, Dublo or Tri-ang layout to flexible at moderate cost under our conversion scheme. Send today for our simple conversion form.

BUILD THESE BOATS

A change is as good as a holiday ! Build a "MITE"—length 13 in., beam 4 in., kit **12/10**; "Electrotor" motor **10/2.** "MINX"—length 20 in., beam 7 in., **22/6.** For electric or small diesels.
These easy-to-build kits are first of a new range of boats and aero kits we shall be featuring this autumn. Make a "Mite" and you will want to make the lot. Boat list, **4d.**

"MODEL RAILWAY MAGIC"

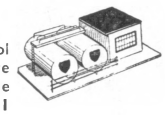
Written for the beginner, this little book contains a host of useful tips and a glossary of model railway terms. Send a copy to that young nephew or the "girl friend's" younger brother ! *From your local model shop*

2/6 Post 4d.

TRADE SUPPLIED BY PECO & A. A. HALES LTD.

TERMS C.W.O. OR C.O.D.
POSTAGE EXTRA
C.O.D. Charge 2/-
Price list for 4d. postage

SOUTHGATE OIL DEPOT

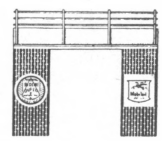


Twin oil tanks, control house and piping give this attractive lineside item full realism. **9/11** (post 1/6)

SOUTHGATE CATALIN TUNNEL MOUTHS

These are our speciality. They are moulded to give a real stone appearance and can be painted and fixed without trouble.
Single or double **2/11** (post 6d.)

SOUTHGATE PLATE BRIDGE FRONTS



These make excellent bridges if fitted in pairs.
Single track **1/9** each
Double track **2/3** each (post 6d.)

GEM UNIVERSAL TRACK

Track	2-rail	**4/9**	3-rail	**6/3**
Points		**10/10**		**12/6**
Fishplates ...				**1/10**
Unilever				**1/10**
Gem catalogue ...				**1/-**

POWER PACKS

H & M Minor **48/-** and **54/-**
Hub **39/6** and **57/6**
Ask for full details.

CELSPRAY

The modellers' robot painter, always ready to spray a fine paint. **8/11** (post 9d.)
Spare bottles **1/-** each
Car spray **7/11**

FENCING

painted white (per 12 in.). **1/-** (post 4d.)

SOUTHGATE MULTIBRIDGE

The footbridge that will fit every platform arrangement (fitted smoke deflectors).
8/11 each (post 1/6)

Come and see us

We always have interesting items to show visitors. Things come and go too quickly to list, and there is always a bargain in the window ! Train to Southgate station from Piccadilly, etc.

SOUTHGATE HOBBYSHOP

1 The Broadway, Southgate, London, N.14 (Pal 4258)
Near Southgate tube station

MERA DEALER

MARKLIN FANS

NO MORE TV INTERFERENCE

after months of experiment "HUB" have developed a new TV suppressor that can be fitted to your Marklin loco. In nine out of ten cases it has either stopped the interference or cut it down so that watching TV and running your Marklin loco at the same time is now possible!

AND ONLY **12/6**
POSTAGE 2/-

"HUB" CHOKE BOX

Using one of the above "HUB" suppressed locos in conjunction with a specially designed choke unit inserted between track and transformer even better results were obtained. Full instructions with each unit. Price of unit 15/-, postage 9d.

NOW MARKLIN on 12 Volts D.C.

WE WILL CONVERT YOUR MARKLIN LOCO to 12 Volts D.C. and fit with the new "HUB" suppressors for the total cost of **34/6**
POSTAGE 2/-

HUB MODEL RAILWAYS OF THE WORLD
REGD. TRADE MARK

TAYLOR & McKENNA LTD

98, CRAVEN PARK ROAD · HARLESDEN, N.W.10

TELEPHONE: ELGar 3573

Open until 6 p.m., except Thursday, close at 1 p.m.

Revell !

Hobby Dealers

If you are not already on our mailing list and receiving the regular monthly News Letters, please contact us immediately and you will then be sure of receiving the up to date news on the supply of Revell Kits for the coming season. All that is necessary is a Post Card giving your Firm's full name and address and we will do the rest.

Revell Enthusiasts

Keep in touch with your local Hobby or Toy Shop, who will be pleased to inform you of the latest news regarding the Revell programme for the coming season.

An exciting range of Revell Authentic Hobby Kits will be available starting next month. Your local dealer will be pleased to give you full information.

Distributed to the Hobby and Toy Trades by :—

B.M.P. Ltd. 40 WATERLOO STREET, HOVE 2, SUSSEX. Tel. HOVE 70359

Universal Hobbies Ltd.,

174, Allerton Road,
Liverpool 18. Tel: ALLerton 1124.

We stock—

Rivarossi, Trix, Gem, Peco,
And all Model Railway Accessories.

Note Our 24 Hour mail order Service. All goods despatched immediately, on receipt of order.

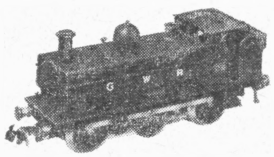
Stockists of—

Highway pioneer Car Kits.
Revell Plastic Kits.
Art Master Painting by Numbers.

And a full range of Model Aircraft, kits and accessories by all the leading Manufacturers.

NEW TWO-RAIL LOCOS

For Wrenn, etc., tracks (H/Dublo conversions)—B.R. 2/6/4 tanks, **£4/10/-**, B.R. "Silver King" and tenders **£4/19/6**, B.R. "Duchess Montrose" and tenders **£5/5/-**, 0/6/2 tanks **£3/10/-**.



NEW G.W.R. PANNIER TANKS

(ALL METAL DIE-CAST BODIES)

2 Rail for Tri-ang **47/6**
3 Rail for H/Dublo **59/6**
2 Rail with Romford wheels **90/-**

NEW L.M.C. GAUGE "O" BARGAINS.—S.R. 4/4/0 and tender, with smoke apparatus, **£7/10/-**; 4 coupled mechs. with smoke, **50/-**; brass fishplates, **6d.** doz., **5/-** gross. S/H items in excellent condition—L.M.S. and S.R. 4/4/0 and tenders, **£5/19/6**; 0/4/0 saddle tanks, **£4**; L.N.E.R. 0/6/0 standard freight and tender, **£6**; L.M.S. 2/4/2 tank, **£5**; N.E. 0/6/0 tank, **£5**.

UNUSUAL LOCOS FOR H/DUBLO (New Tri-ang conversions)—Class "3F" 0/6/0 tank, **50/-**; diesel shunter, **50/-**; saddle tank, **50/-**; "R55" streamlined diesel, **£3/17/6**.

WE PURCHASE GAUGE "OO" TRAINS, GAUGE "O" LOCOMOTIVES, BRASS TRACK

COMPLETE LAYOUTS EXCHANGED TO ANOTHER MAKE

Twin-Trix Bargain List, **2½d.** Graham Farish New Locomotives, **2½d.** Postage extra. S.A.E. with enquiries

HATTONS

136, SMITHDOWN ROAD, LIVERPOOL 15

REINTRODUCING

MASTER-PIECE PARTS (4 mm. scale, 16.5 gauge) now available as Kits (including Master-piece 8-spoke Wheels). Ideal for 2-rail or 3-rail layouts.

SENSATIONAL SPECIAL PRICE

2/6 per kit

Postage and packing 4d. per kit.

Make your choice from this list:

	Fish Van	Low Open
Guards Van	Fruit Van	High Open
Petrol Tank	Meat Van	All-steel

TRANSFERS:

Wagon Transfers (white letters)
N.E., L.M.S., G.W. or S.R. ... ... per pair **2½d.**
British Railways ... ... per pair **3½d.**

Petrol Tank Transfers
"Shell BP" for white tankers ... ... set **1d.**
"Shell BP" for black tankers ... ... set **1d.**
"Esso" ... ... set **1d.**
"Regent" ... ... set **1d.**
"I.C.I." ... ... set **1d.**

REALISTIC LOADS:

7 assorted packets. Price **4/7**, including postage.

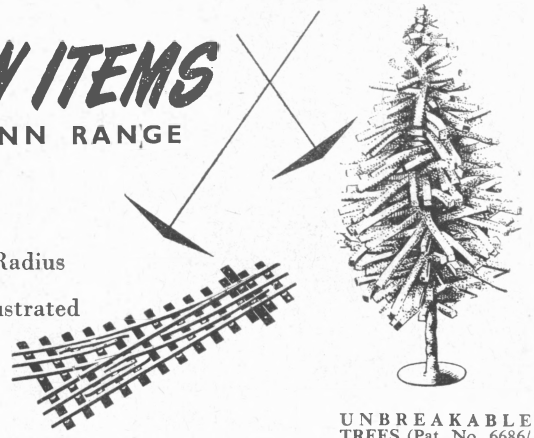
The ERG CATALOGUE—Price **1/9** including postage

ERG (Bournemouth) LTD

529 Roumelia Lane, Boscombe, Bournemouth

2 MORE NEW ITEMS
FROM THE WRENN RANGE

Here are further editions to the comprehensive Wrenn Range of Track and Point work. The 15" Radius Universal Point and these realistic trees both illustrated and described below will add interest to your layout at a minimum cost.



Ask your retailer to show you the Wrenn Range of Universal products or send a 9d. Postal Order direct for sample of Flexible Track and new literature or 2½d. stamp for literature only.

15" RADIUS UNIVERSAL POINT

2-rail L.H. type 0057, R.H. type 0058.
3-rail L.H. type 0059, R.H. type 0060.

This point has been designed for space saving and with a length of only 6½" is ideal for small layouts or wherever space is limited. It is sturdily constructed and being Universal is suitable for all types of rolling stock. (Price and delivery to be announced.)

UNBREAKABLE TREES (Pat. No. 6686/56). Inexpensive. Realistic and well made. Provided with a detachable rubber sucker base.

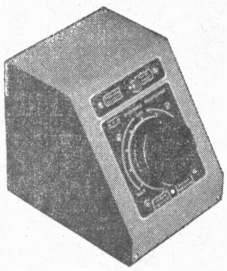
They are ideal for modellers, adding just that touch of atmosphere so essential to even the smallest of layouts. Supplied in three standard types, A, B and C: Type 0069, A, B and C, height 6", price 1s. 0d. each. Flexible hedging, bushes and more elaborate trees will be added to this range.

WRENN

G. & R. WRENN, HONYWOOD ROAD, BASILDON, ESSEX

H AND M

For those who insist on Quality



MULTIPACK CONTROL UNIT, NOW INCORPORATING G.R.C.!

This famous controller is now further improved by the addition of G.R.C. (see below) at no extra charge ! With its Airflow resistance. Overload Cut-out, single-knob control, instrument-finished case, suitable for single supply or split potential circuits, suitable for all motors up to 1 amp working load, it is undoubtedly the finest Controller on the market, irrespective of price. Fully tested and guaranteed.

PRICE STILL ONLY 30/- (Postage 1/6)

WHAT IS G.R.C.?

This new feature, entitled GRADED RESISTANCE CONTROL, has been designed by H & M engineers to provide the most up-to-date advance in power control. G.R.C. enables the operator to alter at will the basic resistance of his controller without need to change resistance mats. A tiny switch provides instant selection of high, medium or low resistances with FULL-SCALE control in each case. One controller now becomes suitable for all motors up to 1 amp working load ! Invaluable where mixed stocks are run, using motors of varying current consumption. And exclusive to H & M !

THE ONLY CONTROLLER GIVING FULL-SCALE CONTROL WITH ALL MOTORS!

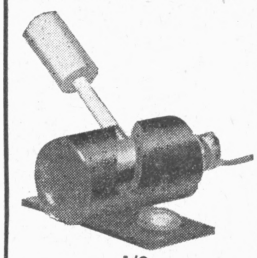
NEW 1956/7 COMPLETE CATALOGUE NOW READY PRICE 3d.

HAMMANT & MORGAN
HANDEM HOUSE, 39 MASON'S AVENUE
WEALDSTONE, HARROW, MIDDX. HAR 5424

THIS SPACE RESERVED FOR A

Rebuilt or otherwise the Bulleid Pacifics have always been held in high esteem. Your Farish West Country can have that extra power with a Tri-ang Mk. IV motor. Fitted **37/6** per your own loco. 40-1 Nylon Gears **6/3** extra.

3R Point Lever

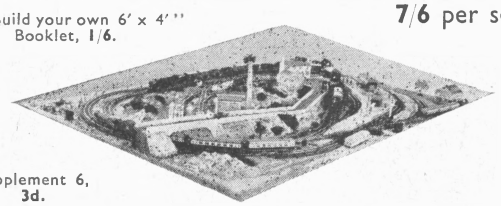


1/9

Treat your loco to Nylon Gears. It's Power Plus with Nylon. Change to Nylon Gears now. Watch that smooth Transmission of power from the motor to the driving wheels, powerful and resilient, that's NYLON. Gear ratio 40-1, worm dia. ¼" length 15/32", shaft size 3/32" (force fit), gear dia. ⅜", axle bore to fit Tri-ang Axle 9/64"

7/6 per set

"Build your own 6' x 4'" Booklet, **1/6.**



Supplement 6, **3d.**

Whilst on holiday we hope you will have the opportunity to swim and float in the sea. When you return home let your track have the same enjoyment—"float" it on our ⅛" thick cork. This superb material per 36" x 24" sheet, **7/-.**

Trade enquiries for Nylon Gears to
JENNINGS MODELS LTD., 116 Broadway, Bexleyheath, Kent.

Your own Tri-ang loco fitted with 40-1 Nylon Gears, **12/6** plus postage 1/6. Dublo conversions to 2-rail Wrenn Universal, **39/6** per your own loco, plus postage 1/6.

The "Home of 6' x 4'"

W. J. & H. G. 114/116 Broadway, Bexleyheath, Kent. **JENNINGS'** **LIMITED Tel: 111 & 7834**

EVERYTHING for 00

We can now supply 12 volt ELECTRO-MAGNETS. Small but powerful—ideal for Magnetic Couplings. Suitable for between-sleeper operation, only **1/9** each.

H. & N. Magnetic Couplings, **2/-** set.

Rivarossi Magnetic Couplings for loco or wagons, **2/-** pair.

We still have a few ACRO 2-rail POINT KITS at **6/-** each.

Super detailed FALLER TUNNEL MOUTHS. Single, **4/6**, double, **5/2.**

TRI-ANG SADDLE TANKS, **33/6**—Bodies only **4/10.**

A MOTOR and GEARS for your loco. for only **14/4** complete.

EVERY TRI-ANG spare always in stock—Brushes **1/2** pair.

You must keep your track clean! Rail Cleaners, **9d.** each.

LAYOUT WIRE—6 yds. **1/-** coil—eight colours available

WRENN Super Universal TRACK for all makes:
2-rail, **4/8** yd. 3-rail, **6/2** yd. Points, **10/6.** Fishplates **4/3** for 48. Send for Wrenn list S.A.E.

Sprung BUFFERS, Loco, **1/10½** set; Wagon, **2/-** set.

BULLHEAD RAIL, N/Silver, **9/4**; BRASS, **7/-** per doz yd.

Our famous CORK SHEET for ballasting and silence:
36 x 12 x 1/32, **1/6**
36 x 12 x 1/16, **2/6**
36 x 12 x ⅛, **5/-**
Pafra for fixing **10d.** tube.

Hard-board, Insul. board and battens for baseboard construction.

PRICE LISTS. Romford, **6d.**; G.E.M., **1/-**; Exley, **2/-**; Peco, **1/6**; Ratio, **3d.**; Jamieson, **1/-**; Skinley, **9d.**; CCW, **1/-**; Anorma, **1/6**; Kirdon, **4d.**; H & M, **3d.**; Modelcraft, **1/-.**

Please add postage for Prompt Mail Order Service.

JONES BROS. OF CHISWICK

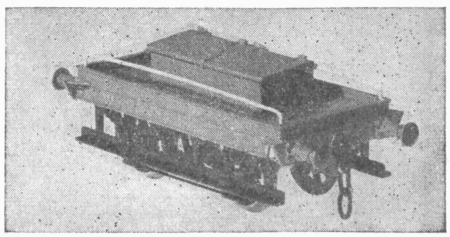
1 min. from Turnham Green Station (District Line)
Hours 9 a.m. to 6 p.m. Thurs. until 1 p.m. Saturdays 6.30 p.m.

56, TURNHAM GREEN TERRACE, CHISWICK, W.4

PHONE: CHI 0858 **ESTABLISHED 1911**

HAVE YOU SEEN THE "OO" MODEL FITTINGS BY **R. WILLS** OF COULSDON?

THEY ARE THE LAST WORD IN ACCURACY AND DETAIL



ASK YOUR RETAILER to show you this model Shunters' Truck. The neatly boxed kit contains 15 parts inc. illustrated instruction sheet. Other components available inc. axle-guards, ventilators, buffers, lamps, etc.

Distributed by:—
A. A. HALES LTD.
60 STATION ROAD, LONDON, N.11

GEM **"FLEXI-TRAK"**
THE NEW FLEXIBLE TRACK WITH HEAVY SECTION RAIL * AND SCALE SIZE SLEEPERS
OO Gauge

The Ideal Universal Track for Dublo, Tri-ang and Scale

	2-rail	3-rail
Gem Flexi-Trak. 3 ft. lengths	4/9	6/3
Universal Turnouts:		
2 ft. radius, L.H. or R.H	10/10	12/8
3 ft. radius, L.H. or R.H	13/2½	15/-
Universal Switch Diamond Crossings ...	14/5	16/9
Fishplates, per three dozen	1/10	

(Postage on track, 2/- any quantity)

ASK FOR GEM FLEXI-TRAK AT YOUR MODEL SHOP

Send for our latest catalogue N.86. It contains full details of all our "OO" gauge models and accessories. 1/- post free

GEORGE E. MELLOR
31a, Rhos Road, Rhos-on-Sea. N. Wales
PHONE:- COLWYN BAY 48462 TRADE ENQUIRIES INVITED

SUMMERTIME-KIT TIME

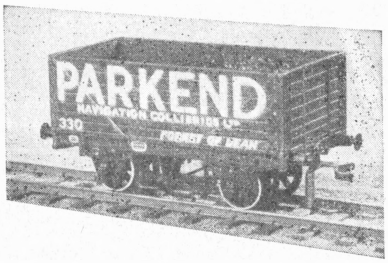
Should the hot, drowsy days of summer divert you from your major projects—why not keep things rolling by adding some kit-built rolling stock to your system? The Peco Wonderful Wagon Kits are easy to assemble, only the simplest of tools are needed, and, being *absolutely* complete, you can slip the convenient sized box into your pocket in the full knowledge that you need no extras. Try a Wonderful Wagon this summer —we know you'll like them.

ALL GOOD MODEL SHOPS STOCK PECO WONDERFUL WAGONS

Our Catalogue is now Out of Print, new edition this Autumn
Send S.A.E. for Price List

AN INVITATION

If you are travelling Westward this year, why not call at Pecoway House, where you can see for yourself the full range of Peco Wonderful Wagons and all the other Peco Popular Products. Seaton is easily reached by rail and road—just a short detour off the A 35—and we are open from 9 to 6 on weekdays, early closing Saturdays.



ALL TYPES ONE PRICE

ONLY 7/6 COMPLETE

with wheels and couplings **"00" Gauge**

Now available

NEW Salt Wagons 4 Varieties
P.O. 7 Plank Coal Wagons 12 Varieties

Further names and types n preparation
See your dealer for the latest items

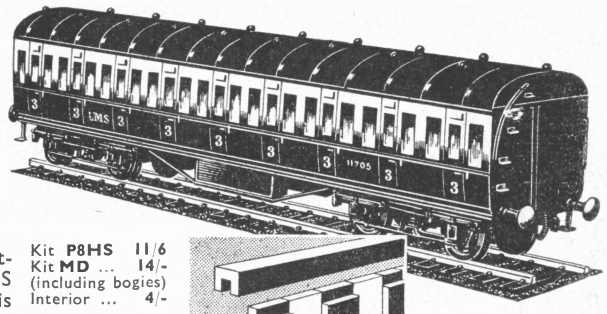
TRADE ENQUIRIES TO THE MANUF;

THE PRITCHARD PATENT PRODUCT Co LTD
PECOWAY—STATION ROAD—SEATON—DEVON
TEL. & GRAMS.—SEATON 542

Build Your COACHES

★ with maximum realism
★ with minimum effort
★ at moderate cost

with CCW Kits and Parts



This superb model of an LMS Local 54 ft. 3rd Class Compartment Coach was built with CCW "Body" Kit P8HS ("OO" gauge) with External Fittings Kit MD — and is typical of the very wide range of CCW kits available.

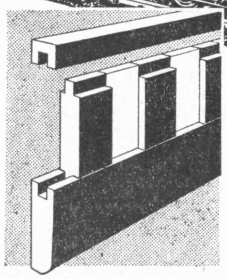
Kit **P8HS** 11/6
Kit **MD** ... 14/-
(including bogies)
Interior ... 4/-

The wood sides, roof, floor and solebars are precisely machined for immediate assembly, and the exclusive CCW cast metal ends add useful detail. The "OO" bogies are from the CCW range at only 6/- per pair (2- or 3-rail) and the Fittings include shell vents, round buffers, couplings, improved truss rods, battery box, dynamo, vac set and vac pipes.

LMS COACH CONSTRUCTION KITS (Local)

		"OO" Gauge Body	Int.	Ftgs.	"O" Gauge Body	Int.
54 ft. 3rd Compt. Coach ...	**P8HS**	11/6	4/-	14/-	**P8** 20/-	5/6
54 ft. 1st " " ...	**P9HS**	11/6	4/-	14/-	**P9** 20/-	5/6
54 ft. 1-3rd Lav. Compo. ...	**P10HS**	11/6	4/-	14/-	**P10** 20/-	5/6
54 ft. 3rd Brake	**P11HS**	11/6	3/-	14/-	**P11** 20/-	4/6
VANS LMS Horsebox ...	***G28HS**	4/6	—	8/-	***G28** 7/6	—
LMS 42 ft. Luggage ...	**P21HS**	8/-	—	11/6	***P21** 14/6	—

*Wood Ends



SEPARATE PARTS are available for freelance Coach Construction

Both Experts and Beginners will find much of interest in the 40-page CCW Orange CATALOGUE of Kits and Accessories for "OO," "HO" and "O" gauges. Please send 1/- (Post Free).
"SCALOH" Supplement for fine scale "O," including the famous Rocket Precision Track and Components. Price 6d. (Post Free).
Please send 2½d. for Summary List of Kits and "OO" Bogies.
All CATALOGUES FREE to OVERSEAS

CCW PRODUCTIONS

Dept. M., Bridle Path, Watford, Herts England

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Demonstrations by craftsmen of the skills needed in model making to take place on three separate stands. In the metal working section, one will be able to see the building of larger gauge steam locos. There will be "round the pole" demonstrations on the marine tank and demonstrations of radio controlled models. A principal feature will be a steam-driven fairground roundabout with steam engine and mechanical organ. The scale is 2½ in. to 1 ft.

At the time of going to press new attractions are still being lined up.

The "OO" gauge model railway layout operated by members of the Ilford and West Essex M.R.C. will again be a major attraction. The layout is 12 ft. by 8 ft. 6 in. and is basically a double track circle with two terminal stations. It is built on four baseboards; three of these have two levels, the fourth being a small end section carrying a double junction.

A new attraction is the "O" gauge model loaned by Mr. R. L. Lee of the Enfield Technical College. It is a model of St. Albans Abbey Station, chosen as a typical single-line country terminus of the old L.N.W.R. and G.N.R. joint railways. The timetable to be operated is based on the actual operations worked at that station in 1922.

There will be a full-scale model of the cab of B.R. Standard Class 8, 4-6-2 locomotive No. 71000 *Duke of Gloucester*. This is fitted with all the actual controls and visitors will get the impression of a railway journey at 60 m.p.h., by means of a film viewed through the driver's window.

There will also be an oval shaped tramway layout, size 24 ft. by 12 ft. in ¾ in. scale loaned by the Tramway & Light Railway Society. It is equipped with overhead current collection and will be operated by members of the Society.

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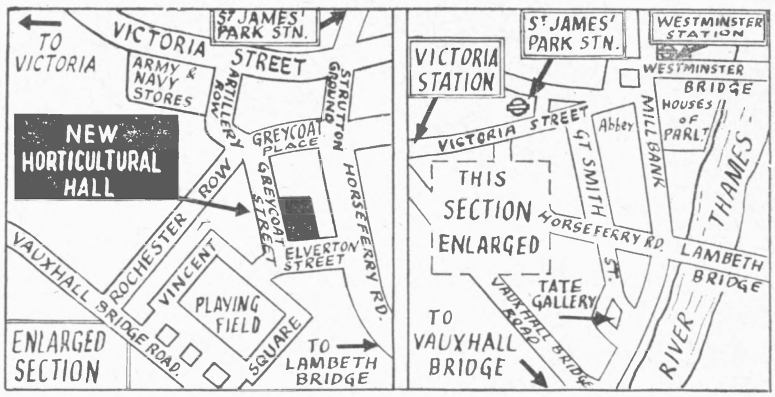

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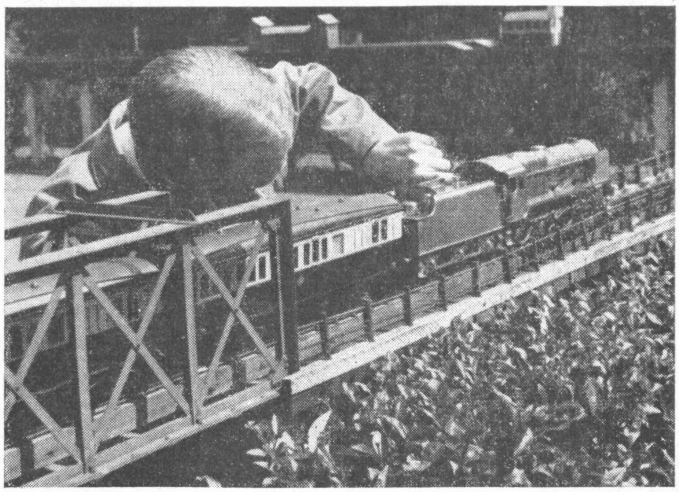

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Volume 32 .. .. No. 380

AUGUST 1956

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MODEL RAILWAY NEWS is published by PERCIVAL MARSHALL & CO. LTD. on the first day of each month

Editorial and Advertisement Offices

19-20 NOEL STREET, LONDON, W.1

Telephone: Gerrard 8811-5

The Editor invites correspondence and original contributions on model railway and railway subjects. Manuscripts should be clearly written, or preferably typed, on one side of the paper only and should be accompanied by a stamped addressed envelope for their return if not accepted for publication.

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EDITORIAL

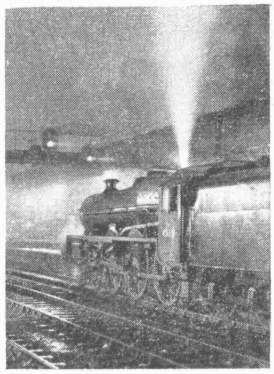
ONCE again, the question of a suitable building in which to house a National Railway Museum has come to the fore. Recently, Mr. C. P. Hopkins, General Manager of the Southern Region, stated that as a consequence of the changes in motive power set out in the British Transport Commission's Modernisation Plan, there could be no allocation of new locomotive construction to Brighton Works after the completion of such work now in hand. So far as could be foreseen at present, Brighton would not be required for either construction or maintenance work after 1958, so the works would close. A suggestion has been made that here is a wonderful opportunity for the acquisition of a building that could house most, if not all, of the locomotives and rolling stock that are already preserved, and leave room for future additions. It is readily accessible from the adjoining railway; it is easily reached from London and from most places in the southern part of the country, and in view of the popularity of Brighton as a week-end retreat and all-the-year-round holiday resort, a fairly constant and highly desirable flow of visitors seems assured.

The allocation of the buildings to so desirable a purpose should not give rise to any difficulties, so far as we can see; it would seem to entail little more than transferring their ownership from the Mechanical Engineer's department to the Historical Relics department. Let us hope that, when the time comes, whatever can be done will be done; meanwhile, any formal difficulties can be discussed and removed while there is still time.

We have always thought that, when a permanent museum for our railway relics can be definitely established in a permanent home, it will be a great day for the model railway hobby. If the exhibits are to give anything like a complete visual record of our railway history, innumerable accurate models will be needed to fill the gaps that exist in the present collection of full-size relics.

ON THE COVER

Most of us look for bright sunlight when we contemplate taking railway photographs, but proof that many a good picture can be made by using adverse conditions to advantage can be seen on our cover of this month. Mr. G. F. Heiron of Wiltshire has produced many photographs of which a singular feature is their atmospheric composition, and on a rainy night in December the *Nigeria* (Jubilee class No. 45619) became his subject, whilst it waited for the green light at Temple Meads, Bristol, with the 7.20 p.m. mail to Newcastle.



RAILWAY TOPICS

by
J. N. Maskelyne
A.I.Loco.E.

Driver L. Parker seen at Paddington station giving the specially-designed headboard a final polish before the first journey of the summer services

SO, the old Great Western Railway colours are back again ! Not only that, but the train that has for so long been called " The Cornish Riviera " has reverted to its original title of " Cornish Riviera Limited," after a very long intermediate spell of " Cornish Riviera Express." And for that matter, I know that in spite of these three different titles, used during the course of 52 years, the G.W.R. and Western Region staffs have never called the train anything but " The Limited " !

Whatever its title, this train is like " The Bristolian " and " The Torbay Express," made up of the latest types of B.R. standard main-line corridor stock painted in the old Great Western colours, officially, but erroneously, described as " chocolate and cream." At least, I have never seen either chocolate or cream that colour; it is more like coffee brown and butter yellow. But it looks very nice, and it has done an old heart like mine a lot of good.

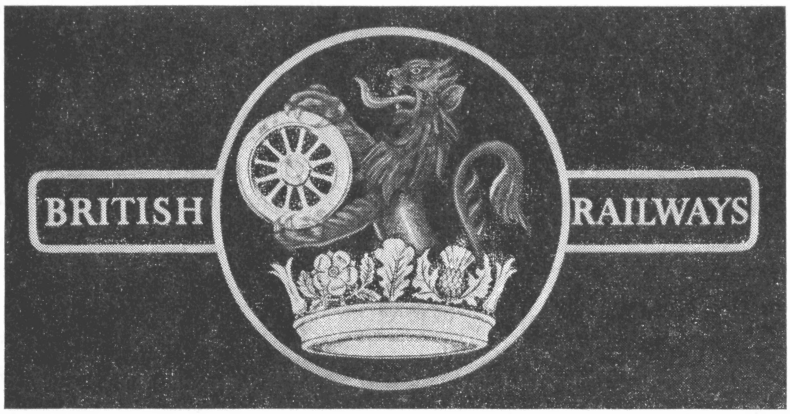
And the new destination boards and engine headboards are good to look upon; *and* they are not all to one standard, but differ from train to train. I understand that, as new stock becomes available, certain other named trains in the Western Region will be similarly treated. I must say that I find this injection of a modicum of variety into the appearance of our trains is quite a powerful stimulant.

At Last !

It has been officially announced that the 0-10-0 banking engine No. 58100 was withdrawn for scrap during the period ending on May 19th last. To my certain knowledge, this engine has been " retiring from business " during the last eighteen months; but now she *has* gone, and the Lickey Incline will know her no more.

I cannot claim that I knew her well, as I have never been very often to the Lickey bank; but she fascinated me immensely, not only as a locomotive, but also as a producer of most impressive noises ! I wonder if anybody has made a sound-recording of her at work; in this respect, she was far more attractive than any diesel or electric engine could ever be. Peace to her scraps !

The " Cornish Riviera Limited " setting off from Paddington station on June 11th, the first journey of the summer time-table



A close-up of the new badge for B.R.

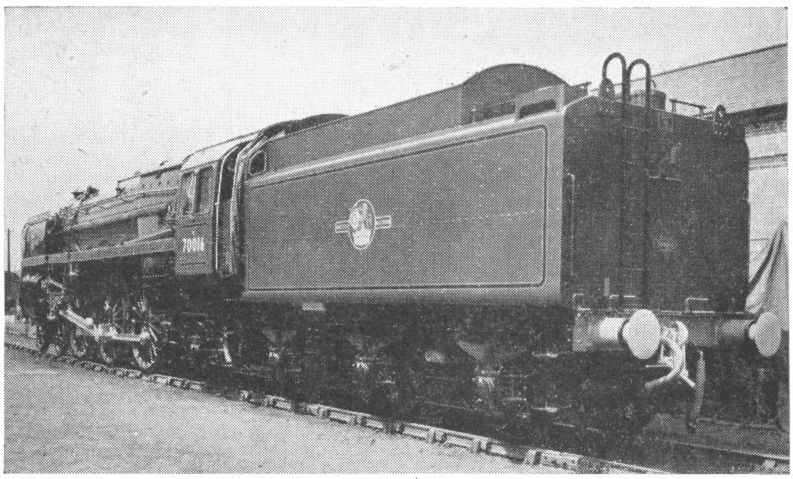
New Badge for B.R.

British Railways' locomotives, power coaches of electric and diesel multiple unit stock, and the coaches of certain express trains are to display a new badge. The badge comprises a demi-lion rampant (the British lion) holding between the paws a silver locomotive wheel. The lion is issuant from an heraldic crown of gold on which are arranged the rose (for England), the thistle (for Scotland), the leek (for Wales), and the oak-leaf (for all Great Britain).

The badge was designed in consultation with Dr. C. A. H. Franklyn, M.A., M.D., M.R.C.S., F.L.S., F.S.A.(Scot.), an eminent authority on heraldry, and has been approved by the College of Arms in England and by the Lyon Court in Scotland.

The first locomotive to display the new badge is the British Railways' locomotive No. 70016 *Ariel* of the Britannia class, which has just been overhauled at Crewe Works. The new emblem will be affixed to locomotives and certain carriages when they are repainted in the course of overhaul.

Personally, I must say I like this new emblem; the lion is now a true heraldic lion, whereas there was always considerable doubt as to the ancestry of the previous, half-starved animal! All the same, neither is such a superb specimen as the well-known Metro-Goldwyn-Meyer lion!

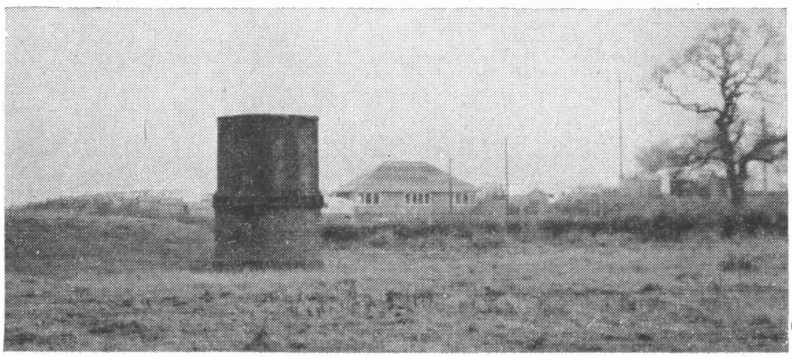


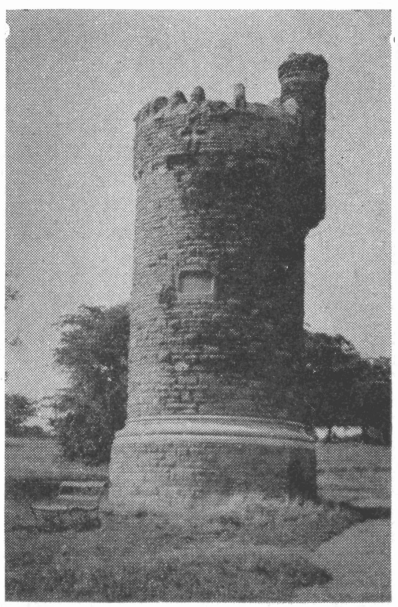
The new badge displayed on Britannia class locomotive No. 70016, "Ariel"

Something Novel

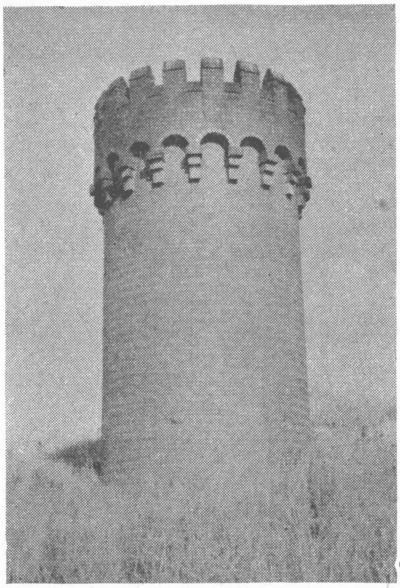
I wonder if anyone has ever modelled a tunnel-ventilating-shaft for his model railway. I doubt if the subject has been even mentioned in MODEL RAILWAY NEWS in all the years since 1925. By way of doing a little towards repairing the omission, here are three illustrations reproduced from some photographs sent me by Mr. Michael Leigh. Some of these towers are quite ornate and eminently suitable for modelling; others are just the reverse. But, at the moment of writing, I have to report that, in spite of an intensive search, I have failed to discover any information as to their dimensions; can any reader help?

A shaft that I knew very well in my young days is one on Sevenoaks Common, in Kent, by the side of the road from Sevenoaks to Ide Hill. I have not seen it for years, but I expect





Tunnel-ventilating shafts—Left—Over Wenvoe tunnel, and right—over Clifton tunnel



The ventilating-shaft over Badminton tunnel

it is still there. In the days before the line from London to Sevenoaks was electrified, the up-draught in the Sevenoaks tunnel ventilators always seemed to be much stronger than that in the Polhill shafts; and I could never understand why, because the same trains passed through both tunnels.

Isle of Man Tram Preserved

One of the oldest electric trams still in existence, Car No. 1, of the Douglas, Isle of Man, tramways, has been presented to the British Transport Commission by the Tramway Museum Society.

Car No. 1 was built at Loughborough in 1896 for the Douglas Head Marine Drive Electric Tramway and was in regular "summer only" use until 1939. It is an open-top car of the "seaside" type, with cross bench seating for 75, is of standard gauge (4 ft. 8½ in.), and weighs 7½ tons.

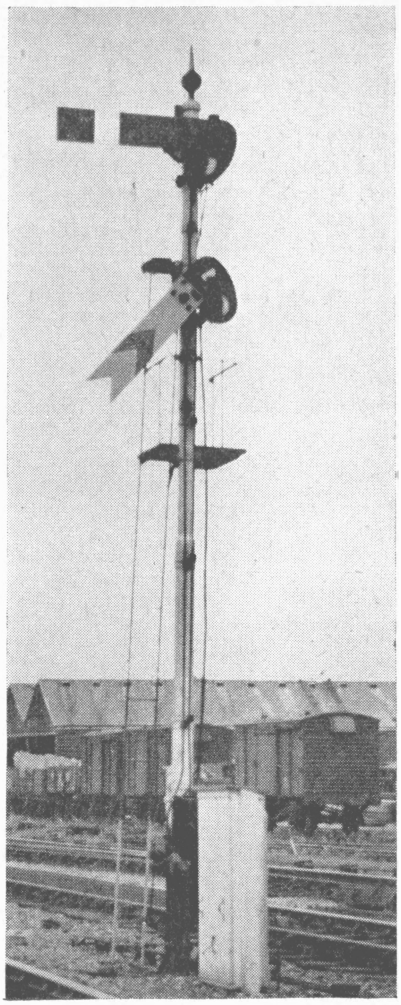
The vehicle will be stored in London until eventually it can take its place in the Commission's growing collection of historical transport relics.

Deliberate or Accidental ?

The correspondence which has arisen under the heading "Signalling," and referring to the "impossible" aspect of a Distant arm being off when the Stop arm above is on, has puzzled me. I had come to the conclusion that Mr. H. P. Needham's example must have been due either to a very badly worn-out slotting gear, or to something having broken somewhere; but, to judge from further letters received, the aspect is not so uncommon as I had supposed, and Mr. W. Garbett, of South Yardley, has sent me the photograph which I reproduce here. I am quite dumfounded ! I know that particular signal very well, but I, personally, have never seen it showing such an aspect as that seen in Mr. Garbett's photograph, and I find it extremely interesting.

All my life, I have been led to believe that such an aspect is impossible, and two questions promptly come to my mind : What has gone wrong ? And what happened when the train arrived ? The only explanation that I can think of is that the Distant arm is operated electrically and that the contact switch that should prevent current getting at the motor until the Stop signal is off has failed in some way, with the result that the Distant arm is free to move regardless of the aspect of the Stop arm. I should imagine, however, that no matter what the fault was, it was not allowed to continue for very long.

Incidentally, this reminds me of a rather amusing effect which these electrically-operated Distant signals sometimes indulge in; when the Stop arm is pulled off, the Distant will also go off, but will at once return to the on aspect and continue to move from one to the other until the Stop arm is returned to the on aspect. I sometimes wonder how much "Progress" some modern electrical devices really represent !



FOR THE BOOKSHELF

Diesel Locomotives. (London: Ian Allan Ltd.) 40 pages, 8½ in. by 10½ in. 84 illustrations, 6 in. colour. Price 2s. 6d.

This is primarily a picture-book illustrating the various types of diesel locomotives at present operating on the world's railways. The accompanying text, however, gives a brief history of the development of the application of diesel traction to railway purposes, and describes the different locomotives illustrated. Towards the end, there are four descriptions of basic diesel applications. The book is excellent value at the price.

Locomotives of the Great Western Railway, Part 4. (Published by the Railway Correspondence and Travel Society.) 92 pages of text; 28 art-paper inserts for 160 illustrations. Price 10s. 6d.

This part, of what is already regarded as the standard history of G.W.R. locomotives, is concerned with the six-wheeled tender engines, and its principal author is Mr. F. J. Tabor, who is regarded as an absolute expert in this particular field.

The amount of detailed information included in this part is fully up to the standard set by previously-published volumes in this momentous series, and shows that no pains have been spared to render the story as complete as possible. It is all the more surprising, therefore, to find some inconsistency in the technical details, more especially with regard to the almost innumerable boiler changes. In some cases, variations in the pitch of boilers are duly recorded; in other cases, the pitch is not even mentioned, whatever the type of boiler.

As before in these books, the illustrations are most comprehensive, and a great deal of labour must have been put into the task of searching for them and selecting them. They provide irrefutable and visual evidence with which to substantiate the text; many of them are extremely rare, some are unique, and all are of inestimable value. Sometimes, these illustrations reveal details that are not mentioned in the text, though it could hardly be expected that, in a book of this nature, everything could be mentioned. All the same, model locomotive builders who set out to build meticulously accurate models are bound to be attracted to a book such as this and to hope that it will give all needed information, in pictures if not in words. An example of the kind of thing we have in mind concerns the cab-side cutaway of the Dean Goods engines; there were two shapes for this on the engines as built, one for engines 2301 to 2450, the other for engines 2451 to 2580. The text does not mention this fact but illustrations D144 and D145 together show it clearly.

Once again, we cannot but admire the care with which all the contents have been collated, sorted and presented; the book, like its predecessors, is an object-lesson in the compilation of locomotive history, and we know of no other publication that provides so much for so little.

The ABC Locoshed Book. (London: Ian Allan Ltd.) 92 pages. Price 2s. 6d.

This booklet is uniform in style with the well-known ABC series British Railways Locomotives. It contains a complete list of locomotive sheds with their official codes; a list of every locomotive on British Railways with its appropriate shed code, and a table giving the allocation of every departmental service locomotive. For anyone interested in such information, the booklet is "just the thing."

RAIL JOINTING AT SECTION ENDS

by J. ROBINSON

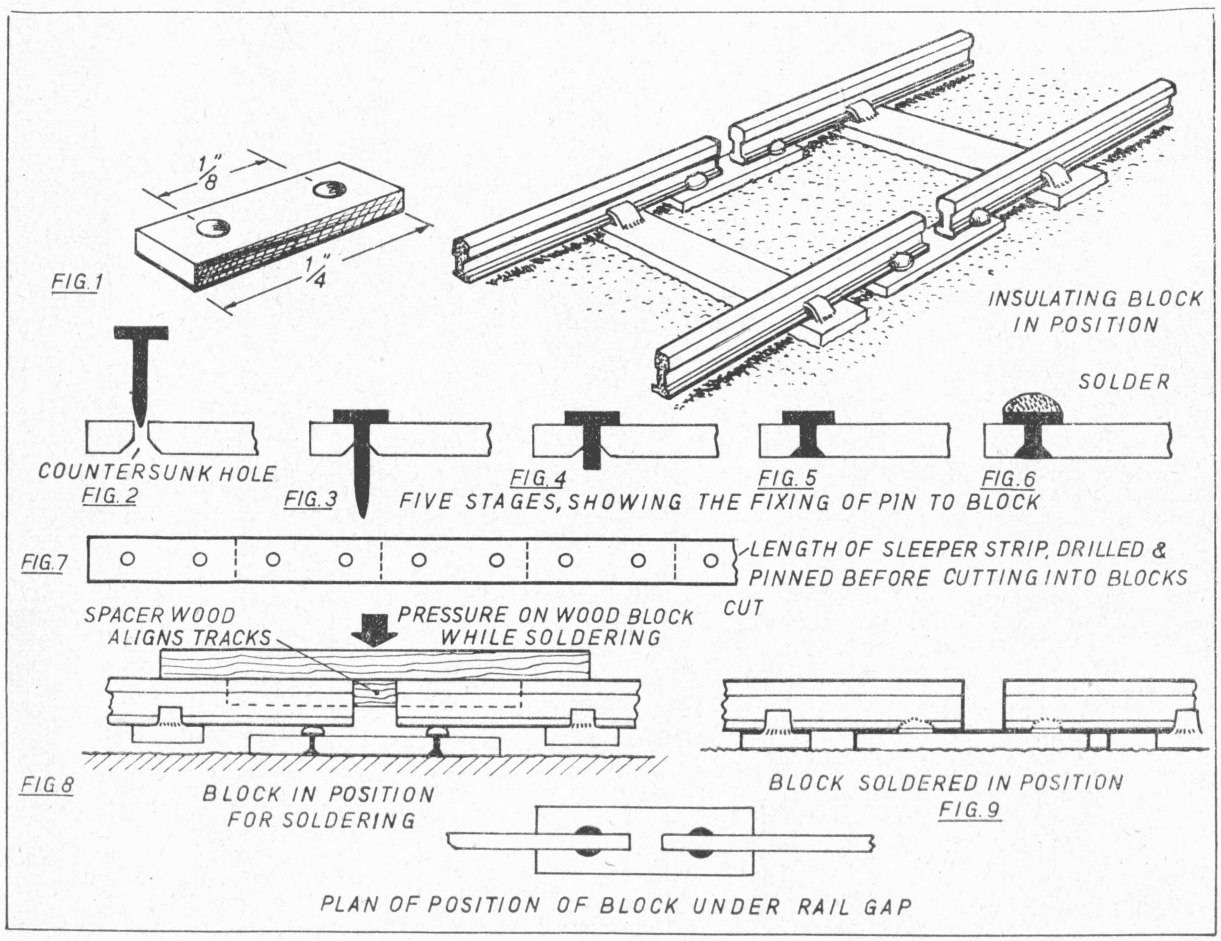
THE other day, as I was looking through a 1952 back number of MODEL RAILWAY NEWS, I came across an article asking if the manufacturers could make a small piece of connecting rail out of plastic or some such material for insulating the rail sections from each other, and at the same time connecting the two rails ends together at the joint, preventing their becoming out of alignment. To date, I have not seen anything on the market for doing this job, so to help any other modellers, I am recording how I have overcome the difficulty on my own layout.

First, take a piece of sleeper strip, the same thickness as the sleepers, drill two holes in the strip as in Fig. 1. Countersink the holes on the underside. Take two small brass nails (as used for pinning down "OO" gauge track), insert a nail in one of the holes and cut it off, leaving approximately 1/32 in. protruding. Place the nail and sleeper strip on a solid piece of metal with the pin head underneath and burr the shaft end into the countersink. Tin the pin heads with solder and cut off the required length of sleeper strip. When making these, a whole length of sleeper strip may be used, making up a number of insulating blocks, cutting them off as required. (Fig. 7.)

When the block is ready for fitting, place it underneath the gap with the pin heads covered by the ends of the rails, then solder, keeping a light downward pressure on the rails with a small piece of wood. (Fig. 8.) This pressure ensures good contact between rails and pin heads, and rail ends are kept approximately at the same level. To make sure of this level, a small file can be run over the joint. To line up the two ends of the track a small piece of wood, the thickness of the rails, may be placed in between them, stretching from sleeper to sleeper over the gap.

The piece of wood which I use is made so that it covers the full width of the track and to this is screwed another piece of wood, which just fits between the two rails, and this keeps the tracks in line while soldering the blocks in place.

These insulating blocks have been in use on my layout for the last three years and I have not had any trouble with the rails coming out of alignment. The blocks can easily be disconnected if the track is being relayed, by unsoldering one end.



Planning a Representative American Layout

By C. A. H. Riches

POSSIBLY your first reaction on reading the title of this article is to wonder what it is that decides anybody to plan a layout on the less familiar American scene ! The reason, in one case anyway, was an unexpected, but most pleasant, surprise gift of a kit of loco parts, and the ensuing problem of how to sensibly incorporate a monstrous great " Mallet " 4-6-6-4.

As most modellers will agree, American stock run on a typically British layout presents a rather incongruous appearance, and the effect of the gigantic locomotive, instead of being impressive, is, frankly, ridiculous.

An Experiment

Another reason was the decision to try something new; to forsake the National railway systems, but purely in the interests of experiment !

Understandably, the modeller who has built up a large layout with much painstaking labour will not fall in with these sweeping suggestions as lightly as this. But, for the newcomer to the art, or the modeller who is still toying with the smaller type of layout, the interesting and novel features of an American single-track railway may prove an attraction.

We are, most of us, well aware of the history of our English railway systems; indeed, we make a point of finding out as much as we can when planning our own layout ! Similarly, a brief study of the history of American railways will be an advantage, before we consider their present-day methods.

Railway History

Many men were responsible for the creation of the railroad empires of the U.S., and perhaps one of the cleverest and far-seeing of these men was Horatio Allen, civil engineer of the " Charleston and Hamburg " railroad.

He is reputed to have remarked: " There is no reason to expect any material improvement in the breed of horses, while the man is not living who knows what the breed of locomotives will place at our command." As was later proved, this was a far-sighted remark for 1829. At that time, the railways scattered throughout the United States were nearly all horse-drawn. It is true that a very few used gravity as the main method of propulsion, by allowing the load's own weight to move itself downhill to canals or roads, but, in the main, they used horses. Even today, the caretaker of a locomotive is known as the hostler, and a roster of locomotives as a stable or stud.

Many years before 1829, unknown engineers in England had realised that their wagons moved more easily if they laid boards in the wagon ruts. But, since the boards wore out quickly, they put strap-iron on them. This wore the wheels out, too, so iron wheels were designed. They noted then that the load their horses could pull was fifteen times as much as before. An interesting point is that, from those wagon wheels, and, incidentally, from the wheels of Roman war chariots, we get our present standard gauge.

The First Charter

The first American railway " charter " granted was credited to one John Stevens from New Jersey, in 1815, but a rough tramway was used in Boston as early as 1795.

The first locomotive in the Western Hemisphere was run over the tracks of the Delaware and Hudson Railway. The Charleston and Hamburg Railway, mentioned earlier in connection with Horatio Allen, quickly attained a length of 135 miles, at that time the longest permanent way in the world.

The Baltimore and Ohio was probably the first railway, as we know it. The news of our George Stephenson's *Rocket* soon travelled across the Atlantic, and an American inventor (Peter Cooper) produced a prototype named *Tom Thumb*. This loco, was literally, produced from odds and ends, and on August 28th, 1830, it ran for 13 miles on the Baltimore and Ohio track pushing a wagon containing 24 passengers. Its speed ? Four miles an hour ! The far-seeing B. & O. officials then offered prizes for the design of a practical locomotive, which was won in 1831 by a watchmaker named Phineas Davis with his engine *The York*.

The Race Begins !

Other railroads were soon formed, and the race for better transportation began. Only four years after Phineas Davis' first effort *The York*, the B. & O. had extended its route for 70 miles, and was carrying 100,000 passengers a year.

The " upstart " railways suffered from the non-co-operation of jealous canal and road systems, and was forced to develop its routes as best it could. Thus a straight run of track was a rarity indeed, twisting and turning as it was forced to do to avoid the rival canals and roads.

To aid in negotiating the abrupt turns, so common then, a four-wheel swivelling truck was added to the front of the locos. It piloted the engine around the curves, and is still called a pilot truck today. Cattle and other obstructions were also common, and the " cowcatcher " was introduced to sweep the tracks clear. Headlights were a slow acquisition, and the first one was a bonfire built on a sand base on a flat car. The flat car was pushed ahead of the locomotive.

By 1840 there were 2,800 miles of track. In 1870 this had increased to 54,000 miles, and in 1930 a quarter of a million miles of railway spread over the great continent.

A Great Merger

I will ignore the commercial dealings of the period, except to say that the greatest merger in American railway history was when the two " greats," Union Pacific and Central Pacific, joined in 1869 to form a direct line across the continent.

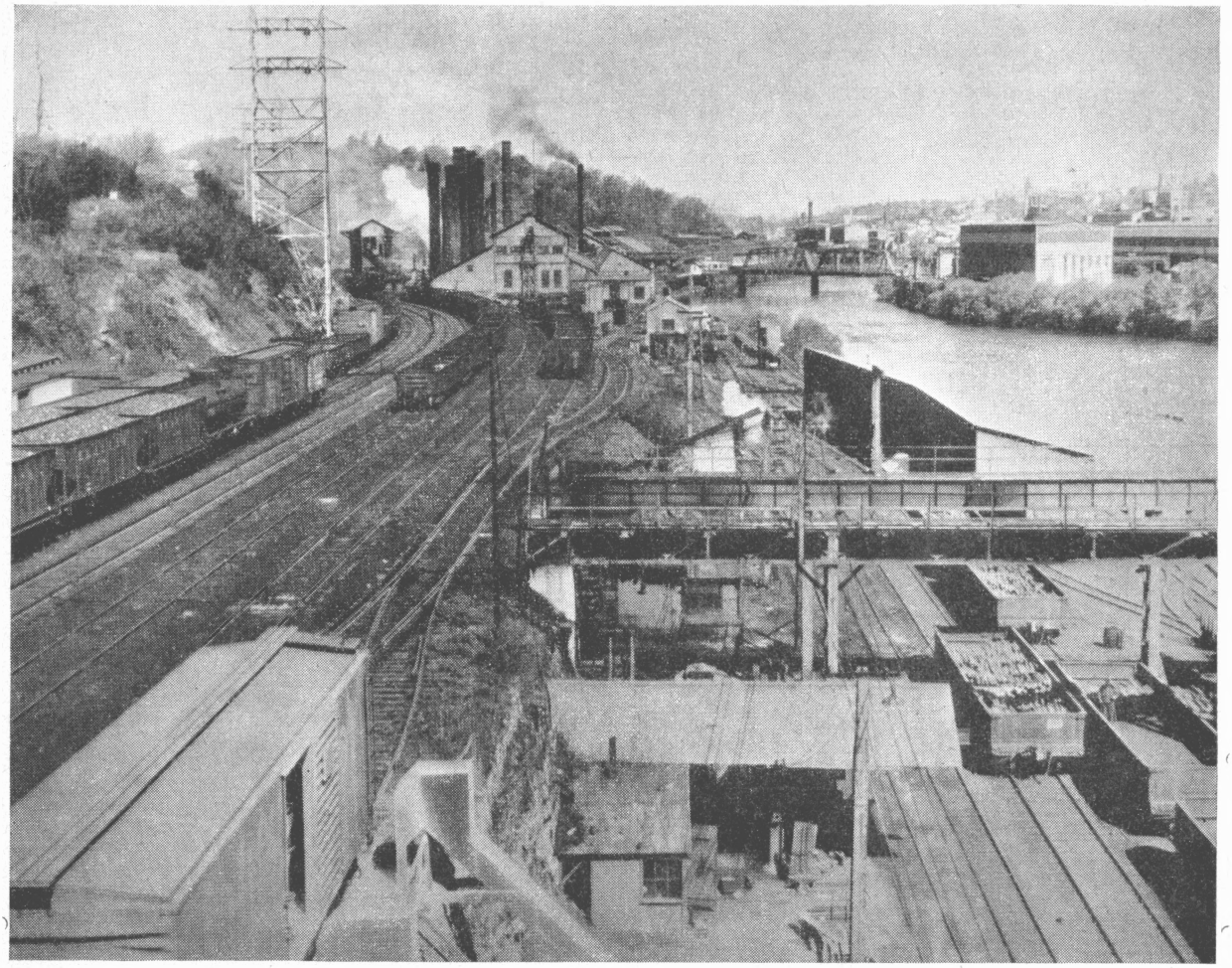
Advancing Design

Locomotive design, also, was advancing, though maybe not at the same rate. The single driving wheel had been augmented, with extra drivers coupled by rods to the powered drivers, and traction was greatly increased. But, the locomotives still used link-and-pin couplers, and their brakes left much to be desired, especially in icy weather and on down gradients. Many men, George Westinghouse among them, worked to get a practical brake for trains. The Westinghouse air-brake is still in use, working on compressed air built up by the engine. The principle is that the air pressure holds the brakes loose, while a release of pressure tightens them. Thus, when any error occurs, or a train parts, the brakes are applied automatically.

Automatic Signalling

The problems and chances of human error, associated with the hand signalling systems then in use, were not being disregarded, and the Union Switch and Signal Company developed electrical systems, and automatic block signals, with various devices to improve the signalling methods. Most railways, nowadays, are equipped with an automatic device which stops the train if it passes an unfavourable signal.

Superior types of coal-burning locomotives are under experimental construction by the engineers; they blow coal into gas turbines, and see what they get in the way of power. They



An American railroad and dockside scene at Philadelphia

build steam turbines, and work steadily, not for size, but for efficiency. Nevertheless, the diesel is not the end product; a small gas turbine can produce power equal to the larger diesel motors.

Books

That snippet of railway history was, of necessity, brief, but, I would recommend, for full details of 44 typical American railways, including maps of the systems, the publication " Railroads of America." This book, cost 11s. 6d., is available from Bradshaw Model Products Ltd. (usual disclaimer). While on the subject of books, I want to mention the " Model Railroad Cyclopaedia " (45s.), and " Frank Ellison on Model Railroads " (15s.). The first-mentioned book includes prototype plans, drawings and photographs, and the latter book, a product of the " Edward Beal of America," provides matchless photographs, detailed information, and a true-to-life description of the " Delta " lines owned and operated by the author. These books, also, are stocked by Bradshaws, and a variety of other titles is sold by Willen Ltd. of Fleet Street.

Planning

Now, a note for the modeller who feels he may become homesick for British railway methods; why not plan on the same lines as the Chicago-North-Western Railway ? This is the only railway in the United States of America that runs on the left side, and has a left-hand drive; it was designed by English engineers !

If, like me, you are a practical modeller who is willing to use commercially produced items when suitable types are available, you will find a good supply of American-outline rolling stock, and castings, etc., held by various stockists.

What Do You Want ?

This article was written, at the suggestion of the editor, as an introduction to the planning of an American layout, and, it is hoped, to a series of articles on the subject. This latter hope will only be realised if sufficient interest is aroused. He also suggests that, probably, there are not a great many British modellers who favour an American style layout; so, if you are interested, and would like to see a series of more detailed articles, please let the editor know.

Finally, I have included an illustration which, I feel, will be of interest. It shows a typical dockside scene at the port of Philadelphia. You may notice that the installations, etc., are not so complex as to be outside the scope of the average modeller, and if you close your eyes to the boxcars, it could easily be mistaken for a typical British yard.

USEFUL CHAIN

A length of chain, 32 links to the inch, came into our offices from S. & B. PRODUCTIONS, 3, Orton Buildings, Portland Road, South Norwood, S.E.25. We can think of plenty of uses for this delightful product, including operational work in signalling, for it is a surprisingly strong chain for its size. Retail price, 3s. 3d. a yard.

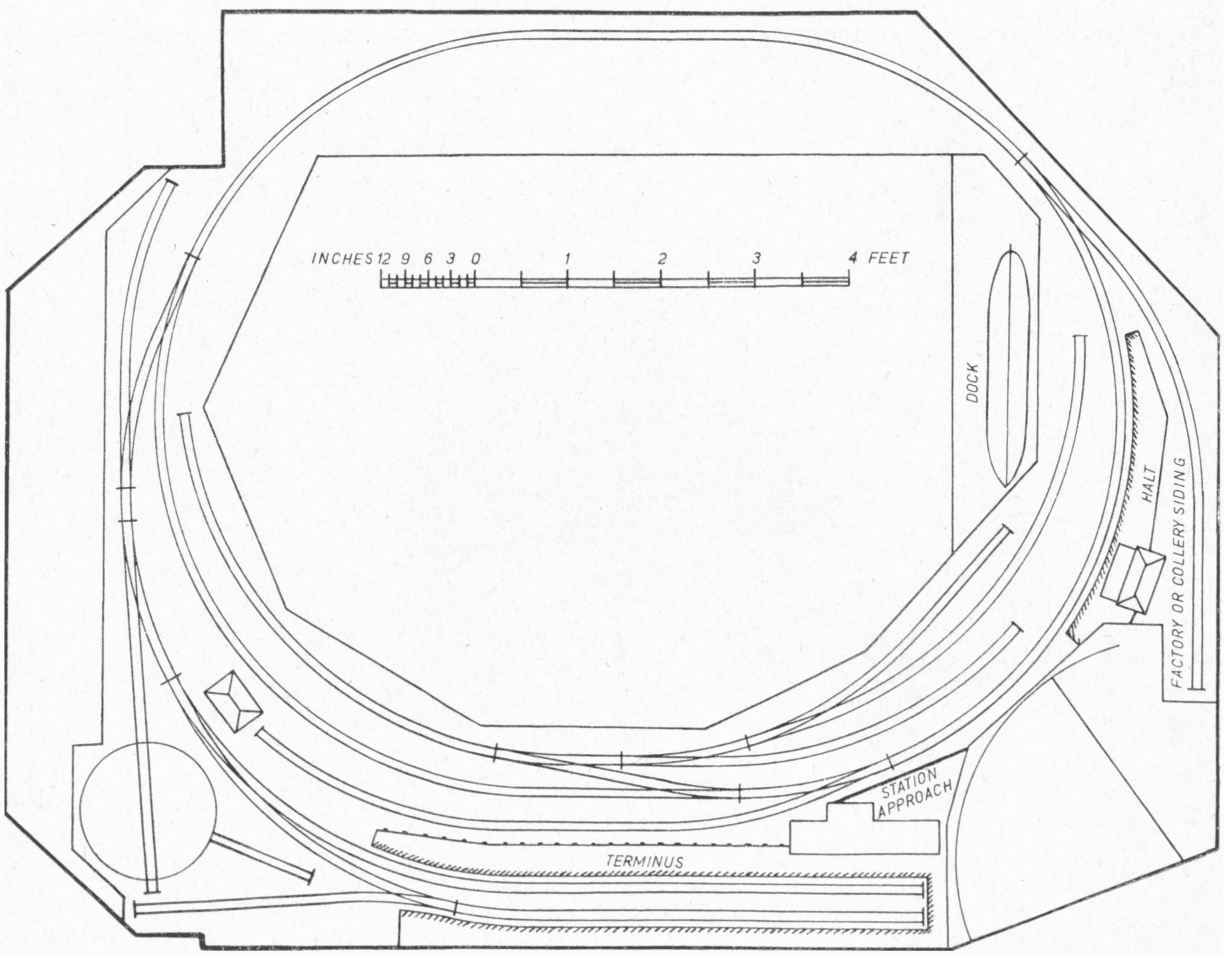
"O" Gauge in a Small Room

LAYOUT PAGE

SMALL houses and "O" gauge layouts are seldom compatible, but here is a design that I made to suit a spare room of approximately 10 ft. 6 in. × 8 ft. in my home. Minimum radii on this continuous system are 4 ft.

The right-hand side of the drawing shows a dock, large enough to accommodate a motor barge or small coaster and a colliery or gas works siding which, even if painted on the back drop, would provide traffic for the goods yard and dock siding. The long siding that extends nearly the whole length of the terminus would act as a storage for trains, enabling the rotation of train services to be broken up, and provides space for an engine and three coaches. The rather bare baseboard opposite the terminus is intentional, the idea being to leave a little room for scenery.

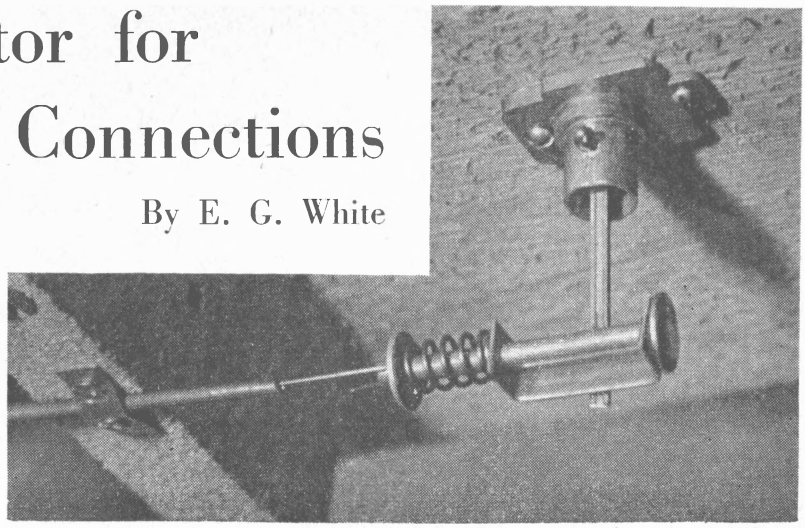
Contributions for "Layout Page" are welcomed from our readers. Drawings should be to 1½ in. to the foot scale, and at least 250 words should accompany the design. Two guineas will be paid on publication of the contribution.



Design by E. B. Trotter

A Compensator for Cable Point Connections

By E. G. White



SATISFACTORY remote control is essential to realistic operating and is a subject deserving careful attention if it is to be trouble free. Modellers are generally limited to two systems; these being electrical with commercial point motors and manual on the Bowden wire principle. The writer has tried both and prefers the latter for several reasons. The main advantages are cheapness and positive lock of blades, the latter being of great consequence because it is then possible to use them as a switch for passing through the current. Accordingly we will deal with this method, installed in conjunction with a Zenith lever frame. The frame needs little mention since it is easily fixed by small screws, but before fixing down it is necessary to fit to each lever a connecting-piece. This is made of $\frac{1}{8}$ in. square brass 25 mm. long, drilled at each end with a 1/32 in. hole. One hole is for the end of the operating wire, the other for a cross pin to connect the base of the lever. A slot 1 mm. wide along 8 mm. of its length permits assembly to the lever. These connecting-pieces are easily and quickly made, although care is required when drilling the small holes. At this stage consideration must be given to the main feature of point operation. Quite simply, to obtain trouble free running and positive electrical contact between blades and stock rail, the amount of travel of the blades should be just slightly less than the movement of the lever. Easy ! Well, not exactly, because this introduces a condition of strain which must be accommodated, otherwise something will break or bend and ruin the job and, worse still, in practice the lever movement is quite a lot greater than that of the blades. This particular difficulty has been overcome by introducing a device which might be called a compensator, shown in the sketches in two parts *A* and *B*. *A* is a simple rocker arm and housing, consisting of a piece of tube $\frac{5}{8}$ in. bore, flat bracket, 1/32 in. pin and a length of "OO" rail. They should be assembled as follows:—

(1) Cross drill tube 1/32 in. about $\frac{1}{4}$ in. from top.

(2) Make flat bracket any convenient size, drill two screw holes and cut or drill hole equal to the inside diameter of the tube.

(3) Solder bracket to tube.

(4) Drill 1/32 in. hole in piece of rail to make the rocker.

(5) Assemble rocker to tube with pin.

This rocker arm can now be screwed to the underside of the baseboard, pushing the rocker arm through fibre slide which moves the blades. Care should be taken to ensure that the rocker arm is centrally mounted, as full benefit is required from the $\frac{1}{4}$ in. hole in the baseboard. Test for free movement.

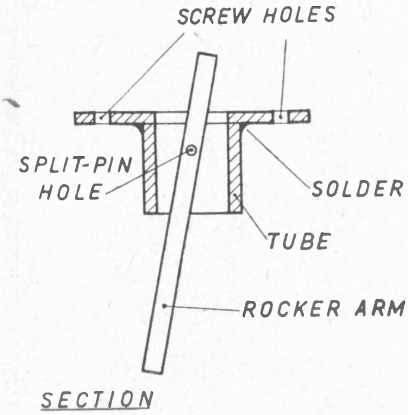
Part *B* of the compensator should now be made. Dimensions are not important, depending rather on the material you may have around. The spring in particular can be of any length or size so long as it is not too weak. As may be seen, this part consists of a double angle bracket drilled through the lugs to take a rod—about $\frac{1}{8}$ in. diameter is best. This rod has a washer soldered to one end, the other being drilled 1/32 in. Assemble as shown, observing only one condition. The spring should have about 1/32 in. free movement between the bracket and washer (or washers if you have to pack it up). This unit should now be soldered to the rocker arm by the bracket, and the job is done.

Neatness

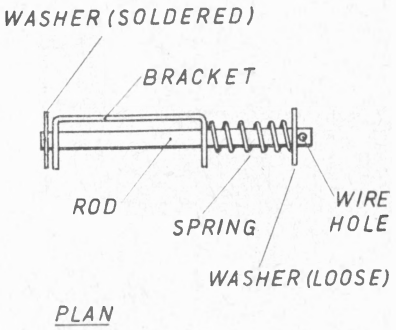
To make your installation look neat, the next job is to prepare a piece of $\frac{1}{4}$ in. square wood the same length of the lever frame. This should be drilled with the same number of holes as the frame has levers, each hole of a size to take the tube snugly, and spaced so that when the strip is screwed to the control panel the holes are in line with the levers. This strip should be screwed down about $\frac{3}{4}$ in. behind the frame. The length of tube required to reach the point should now be cut and one end fitted into the hole opposite its appropriate lever. A number of clips, which can be made out of odd scraps of brass strip, screwed into the baseboard at convenient spots, hold the tube securely in position. The number of clips necessary varies according to the distance and bends in the tube. Radii of bends should be as gentle as possible for ease of operating, and sharp kinks must be avoided. The end of the tube should stop about $\frac{3}{4}$ in. from the spring rod and sufficiently below the baseboard for the wire to line up with the rod.

(*Continued on page* 206)

PART 'A'



PART 'B'



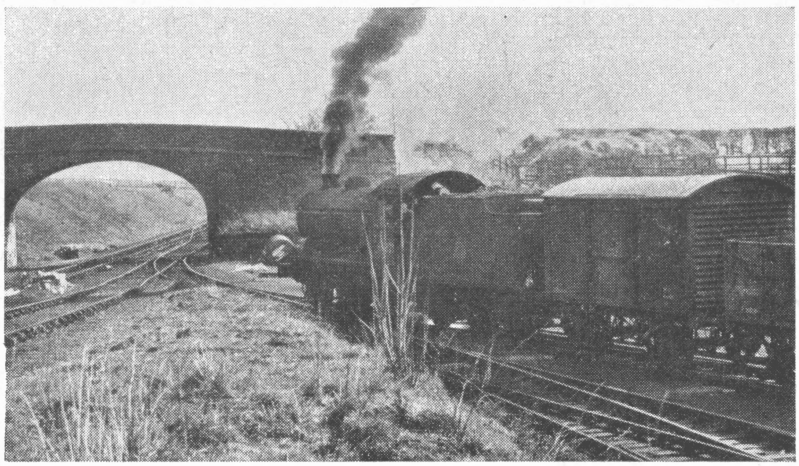
THE MASHAM BRANCH OF THE N.E.R.

LAYOUT IDEAS FROM FULL-SIZE PRACTICE

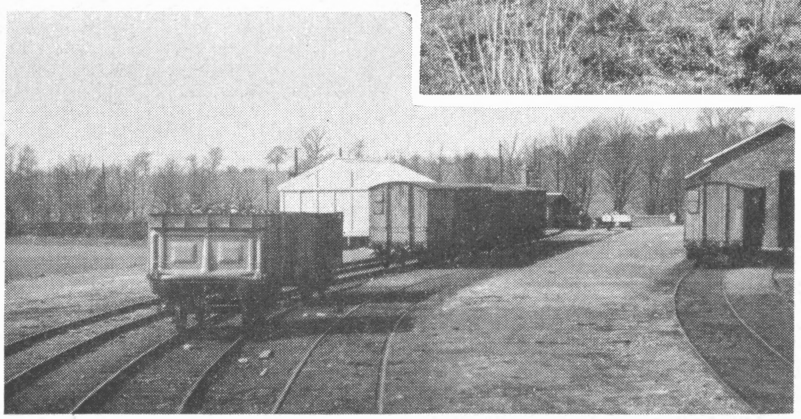
By David Jenkinson

THIS line leaves the Ripon Northallerton main line just over 3 miles north of Ripon and travels about 7½ miles up Lower Wensleydale to its terminus at Masham (pronounced Masham). It was originally projected to link up at Leyburn with the more well-known Wensleydale line proper, but I suppose lack of finance made it peter-out at Masham—yet another example of " might have been." I see no reason, however, why some enterprising modeller should not assume that the extension did exist and model it; at least it would be more convincing than some free-lance designs.

Even as it stands, the line is not without its attractions, and has the advantage that it is not too unwieldy a unit to model in its entirety, although I should leave out Melmerby—it would need a room to itself. Leaving Melmerby the line proceeds arrow straight for almost 4 miles to Tanfield, where the station is at the crest of a fairly considerable climb in the westbound direction. The station itself needs little comment except that it is rather straggling, and the station buildings face away from the goods yard. If one was starting a model here, it would be difficult to disguise the " exit," as the surrounding countryside is pretty flat and treeless. All in all, I should feel inclined to model Masham only, which has an overbridge and cutting placed conveniently.

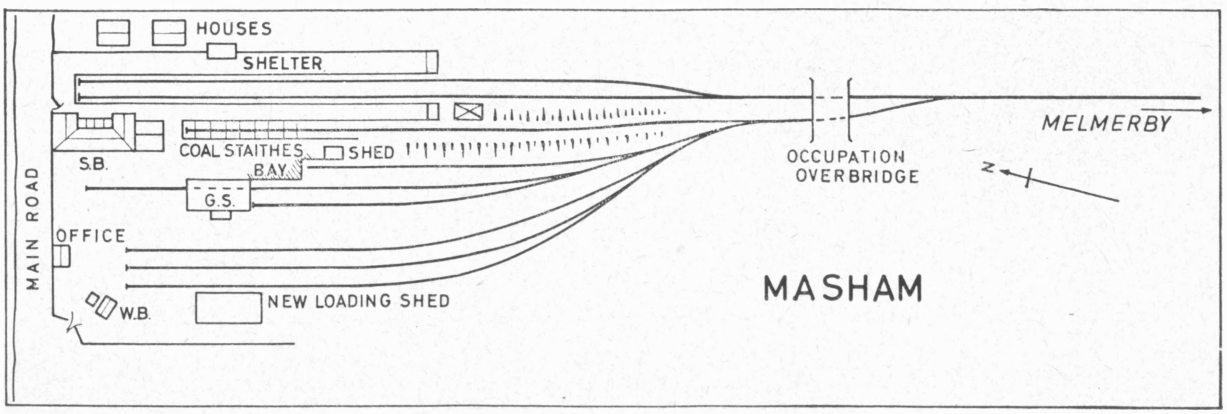


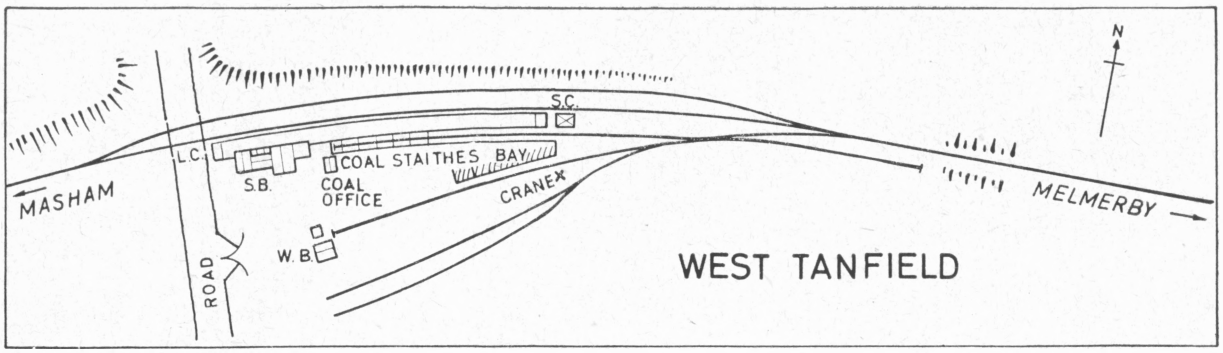
Masham Station throat and daily freight



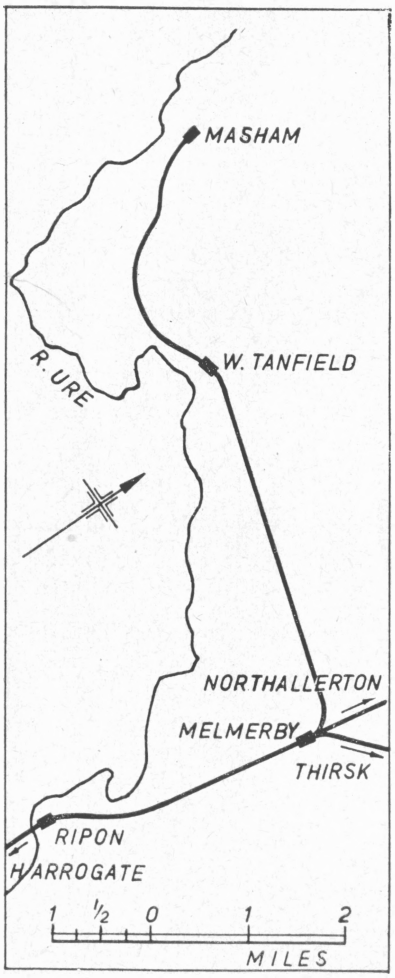
Masham, showing lower goods yard and new unloading shed

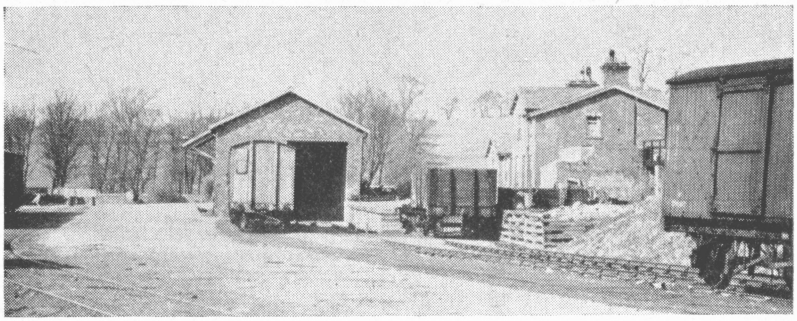
Masham is an interesting station with fairly extensive facilities and, wonder of wonders, a *new* goods shed in addition to the old, as well as a few resident storage vehicles of somewhat dubious vintage. The oddest feature seems to be the absence of any run-round facilities, although I feel sure there must have

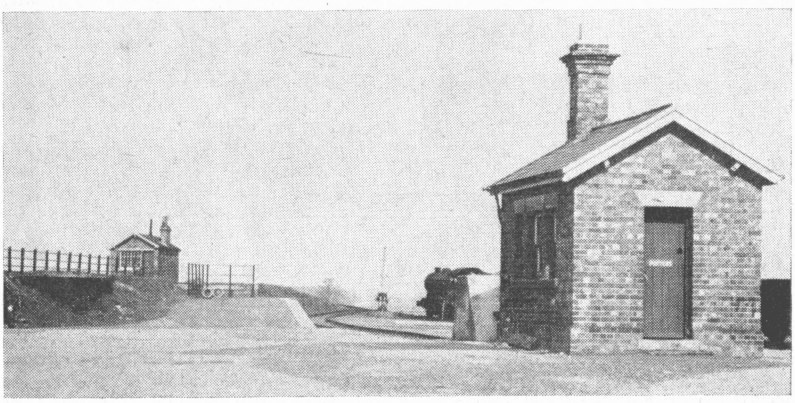


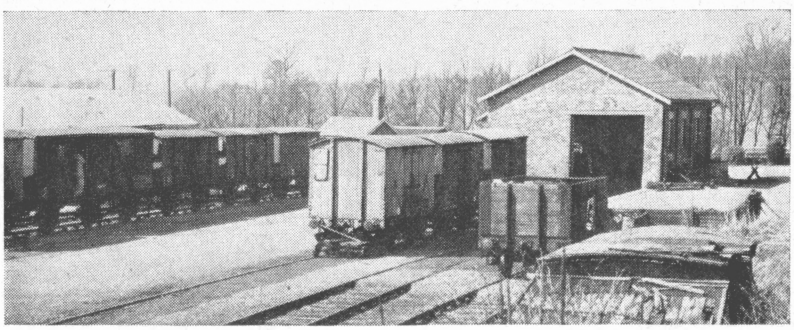


been a platform crossover at one time. When I was up there, the daily freight was on the point of leaving, but I was in such a hurry that I forgot to ask how they did do the shunting. The yard entrance is on a slight downhill slope from the throat, so I assume that the locomotive must be uncoupled and run into a siding, and the wagons allowed to run into another, under their own momentum—unless they resort to fly-shunting !





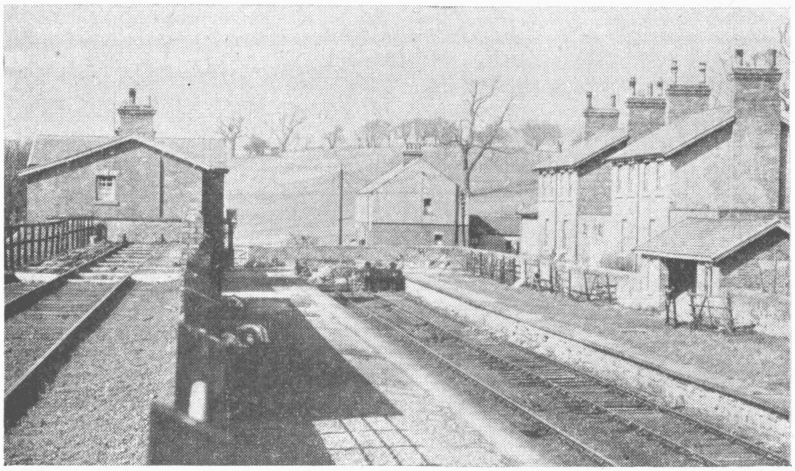




Above—Masham goods shed and station building

Centre—Tanfield, from the goods yard entrance

Below—Masham goods yard from coal road



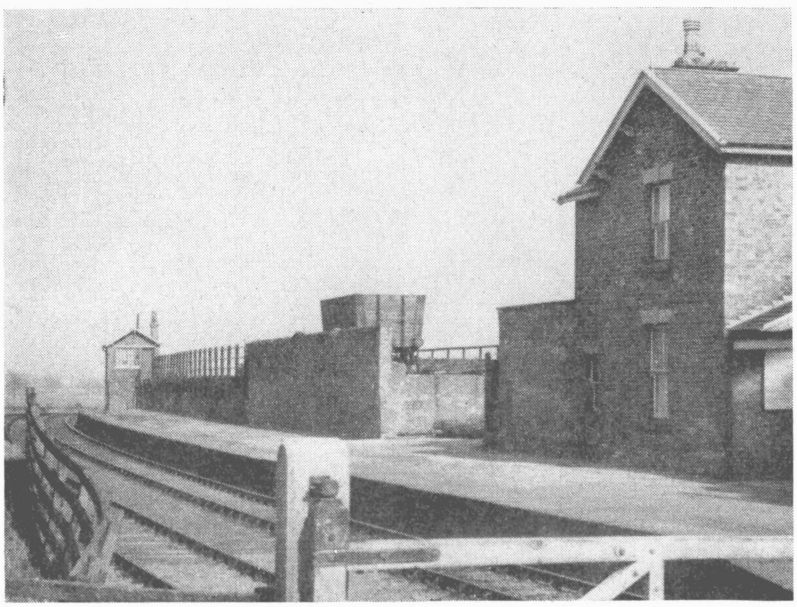
Masham Station platforms, also showing coal staithes

As at Tanfield the main buildings face away from the yard, a feature of many N.E.R. stations I have visited; perhaps they did not like to offend the passengers' feelings, particularly as they usually separated platform from yard by a coal siding as well ! The buildings are of a simple but pleasing brick design —unusual, since most of the local architecture, and much of the N.E.R. architecture, too, is executed in stone— and the whole station has a spacious and tidy appearance.

The passenger service was withdrawn on December 31st, 1930, and up to 1930 was provided by a two-coach set formed from a BT(5) and a BC(2-3) fitted with Westinghouse brakes, seating 12 firsts, 80 thirds and weighing 50 tons. The line was operated by the electric token block system between Melmerby and Tanfield, and by staff and ticket between Tanfield and Masham. The line was operated from Starbeck by J.9's or G.5's and nowadays mostly the former.

The track on the branch is in beautiful condition, being one of the Regional prize lengths; apparently there is a clause in the original powers which necessitates a full time p.w. gang on the line, unlike many branches which on losing their passenger services also lose their regular platelayers.

In conclusion, I would like to thank the staff of British Railways, whose kind co-operation helped to make this account possible.



Tanfield, from the level crossing

A Compensator for Cable Point Connections

(*Continued from page* 203)

The tube must be secured with a clip within one inch of the end; therefore a wooden block will be required, which should be first screwed to the baseboard.

Now feed the wire through the tube from the frame end, greasing it as it goes in until it protrudes at the other end. It should go through quite smoothly. Allow a few inches to spare at the rocker-end then snip off at the frame. Bend end with pliers to a right-angle and insert in cross hole of connecting-piece attached to lever. Test for movement by operating lever. It is wise to fit a brass cover between the wood strip housing the tube end and the frame, to prevent the connecting-piece riding up on the push stroke of the lever. There is a tendency for this to happen.

Final Adjustment

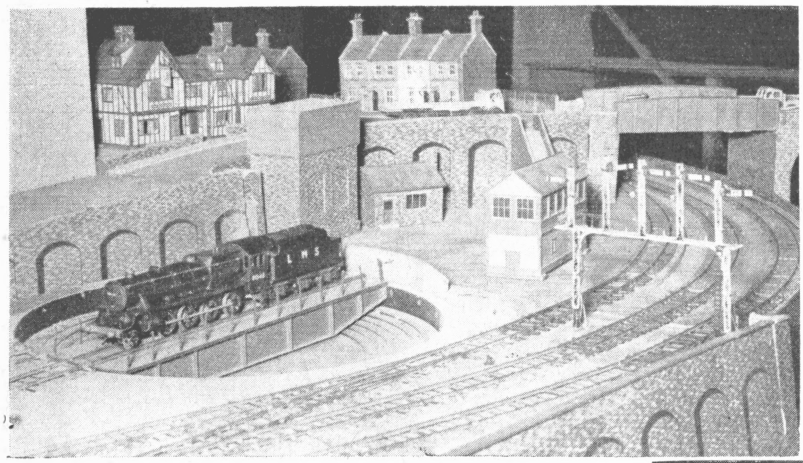
The rocker-arm end of the wire should now receive attention after placing the lever in the pull position, i.e. at the back of the frame. Pull the rocker arm over until the blade above is snug against its stock rail, note the position of the hole in the spring rod, bend wire at a right-angle, snip off surplus, push wire through hole, and with pliers bend at other side of the hole to prevent it riding out. Try and avoid relaxing the tension, but should this happen, dismantle the spring rod and pack with a thin washer between the bracket and soldered end washer. This position will ensure satisfaction for one side of the turnout. Now move the lever to the reverse position, and the blades should move over perfectly smoothly for the other side of the turnout. Here the benefit of the compensator becomes apparent. If the blade makes contact with the stock rail before the lever movement is finished, the spring comes into action and takes the remainder of the push and accepts the strain that is set up. Should the blade not contact at the end of the push, this must be due to one of two things. Either the blade tips are too close, due to faulty drilling of the slide and require opening a little, or, more likely, the freedom of the spring on the rod is too great, thus wasting movement before it acts on the bracket which in turn pushes the rocker arm over. This is easily taken up by packing with washers until the desired result is obtained.

The "Model Engineer" Exhibition

COMMENTS ON A FEW OF THE MANY ATTRACTIONS

ON August 22nd the doors of the New Horticultural Hall, Westminster, will open upon the 31st "Model Engineer" Exhibition. This event has been the meeting place for modellers of many fields, and this year's selection of models looks like being as broad as ever.

The "OO" gauge layout of the Ilford and West Essex Model Railway Club will be out for another airing, and services will be operating throughout the exhibition. Many know the layout well, but those newcomers to the hobby who have never stood at Rumforde Station and looked along the curved platforms towards the turn-table and shed, will find plenty to instruct them.

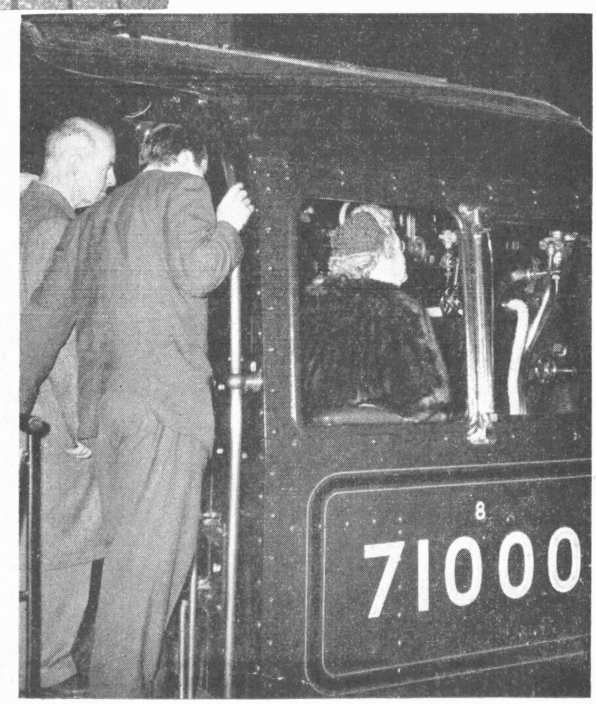


A view from Rumforde Station on the "OO" gauge layout of the Ilford and West Essex Model Railway Club

One of the branches of our hobby that we are glad to see growing stronger is that of tramways. A large amount of the credit due for this popularity can be awarded to the efforts of the Tramway and Light Railway Society, which was formed in 1938. Through this society members are able to obtain details of many British cars. Some of the work turned out by members will be at the exhibition, where the society will be maintaining a 30 ft. straight run of track.

Nothing stands out quite so much at an exhibition of models as a section of prototype machinery. This year, British Railways will be showing the full-size cab of No. 71000, *Duke of Gloucester*, the first of the class 8s. Wherever this section has appeared before it has been the cause of queues, and we hope that its presence this year will create as much attention as it warrants.

A feature of these exhibitions is the numbers of fine models loaned to the organisers. Quite often these models are professionally built, but as the emphasis of the exhibition is model engineering in all its categories, there is nothing amiss with this state of affairs. Unlike other exhibitions, this one is not restricted to the work of any one club or section; it is this catholic approach to model making that the organisers endeavour to foster and creates the tone of the exhibition. Messrs. Beyer-Peacock and Co. Ltd. have loaned a truly fine piece of craftsmanship that will attract the attention of many model railway men. It is a ¾-in. scale model of a Rhodesian Railway 15th class 4-6-4 + 4-6-4 Beyer-Garratt, and is 7 ft. long.

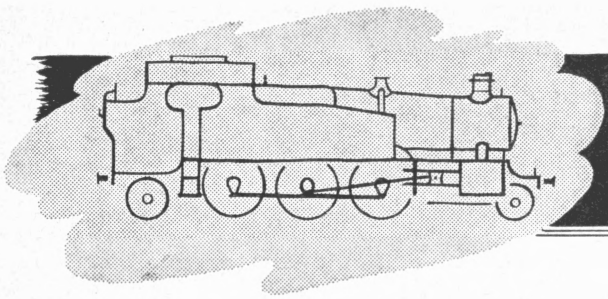


Right: The British Railways full-size cab of the "Duke of Gloucester," class 8 will be at the exhibition for all to inspect

The dispute dealing with the best scale for the indoor man will never be settled, as so much depends upon the individual's point of view. Fortunately for us, ours is a hobby flexible enough to permit almost as many opinions as participants. Mr. Bernard Wright of New Malden is one of the group who model in $\frac{3}{16}$ scale, known as "S" gauge, and his two very different models make a welcome addition to those that will be on view. Both models are of S.R. stock, an "N" class 2-6-0 tender locomotive and an Adams 4-4-2 tank. Very nice, too!

Two Great Western "Bulldogs" have been sent in by Messrs. E. Longbottom and A. S. Taylor, of Bournemouth and Birmingham respectively. These two enthusiasts have co-operated over a period of three years to turn out these 4-4-0s. Both models carry a great deal of exterior detail and bearing in mind the rugged and riveted appearance of this class of locomotive, it takes some pretty patient work to copy it faithfully.

May we remind you that the New Horticultural Hall, Westminster, is quite close to and served by Victoria terminus and St. James's Park Tube station, both on the Circle line. The former is, of course, the destination of many bus services. The exhibition will remain open until September 1st, Sunday excepted, 11.0-9.0 each day.



An "O" Gauge PRAIRIE TANK

by H.J.H. Smith

DURING the past few years I have made several models of L.N.E. and L.M.S. engines with which I am very familiar. It is a great advantage to be able to see the actual prototype of a model under construction, as there are many details that are rather vague in a photograph. This was possible with the L.M.S. and L.N.E. locomotives but not so easy with the G.W., as I live far away from that area. However, having studied a blue-print and as many photographs as I could find, a start was made by ordering an electric mechanism with correct diameter wheels and spacing. This is a standard electric 6-coupled mechanism as supplied by the Leeds Model Company. As I use an outside conductor rail I specified outside collectors, but I was unable to get them and therefore made my own.

Construction

The usual method of building was pursued in making the locomotive. I should have liked to make the whole model in german silver, but right from the start I had decided not to buy anything that could be avoided. Everything but the actual mechanism must be made at home from materials to be found in the scrap-box or around the house. I have stuck to this rule throughout and every detail on the model is made from odds and ends.

Odd Materials

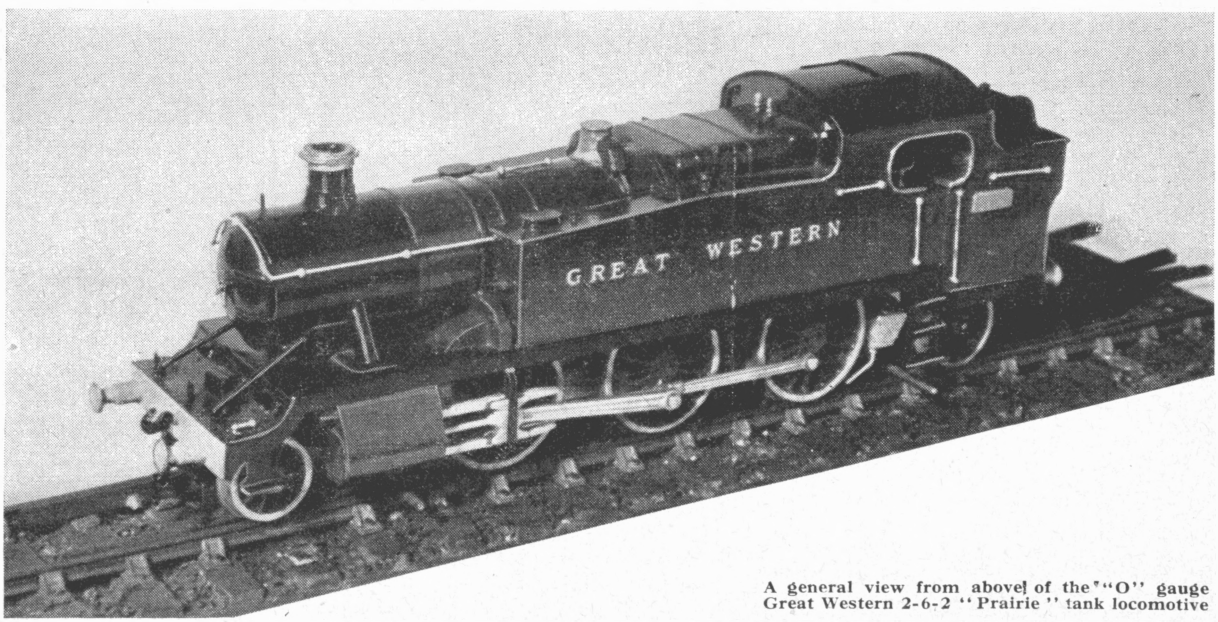
It is surprising what one can press into use for model-making. For instance, the plungers in an electric light socket make excellent spring buffers, suitably doctored. The bodywork is built from tin-plate taken from tin cans of suitable thickness. If the material used is too thick it is difficult to roll it for the boiler barrel and careful selection is advisable. The footplate was marked out on the tin, cut out and bent to shape, then soldered. The rear footstep is rather a tricky detail to make, but repays careful work. In fact, unless care is taken in these characteristic details, a true representation of the engine will not be obtained. It is these details that make the model and to neglect any of them is to court failure. I have tried to be faithful to the prototype as far as I possibly could, remembering that the model must be strong enough to do its job.

The chimney was built up from brass rod topped with copper made up from about four layers of sheet copper soldered together. This was filed up by hand, no lathe being available, and occupied about a week of spare time. Making this little component gave many hours of pleasure, and one can sit comfortably in front of the fire on a winter evening and file away to one's heart's content. The same treatment was given to the rest of the boiler fittings.

Handrails are thin wire and handrail knobs are the same wire filed in half and bent round and soldered into holes drilled for the purpose. Buffers are built up from large nails cut down and shoulders of tin rolled round the shaft. This is then soldered into a hole drilled in the buffer beam. Imitation screw-couplings have been made up from wire and nails.

The Cylinders

These were built up from tinplate, the ends being thicker material. Slide bars are round wire filed square and soldered into holes drilled in the end plates of the cylinders. Making the crossheads was a fiddling job, as the heat of the soldering iron would melt one part when another was being fixed. However, this was overcome and the crossheads were eventually fixed and the connecting-rods made. These were

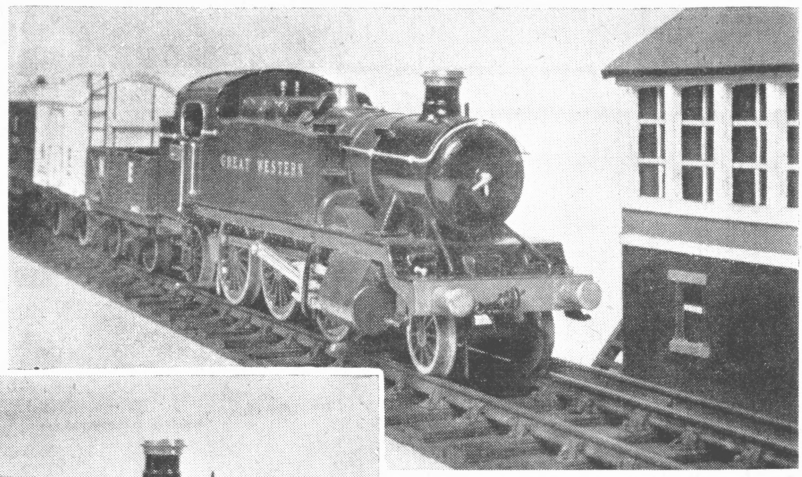


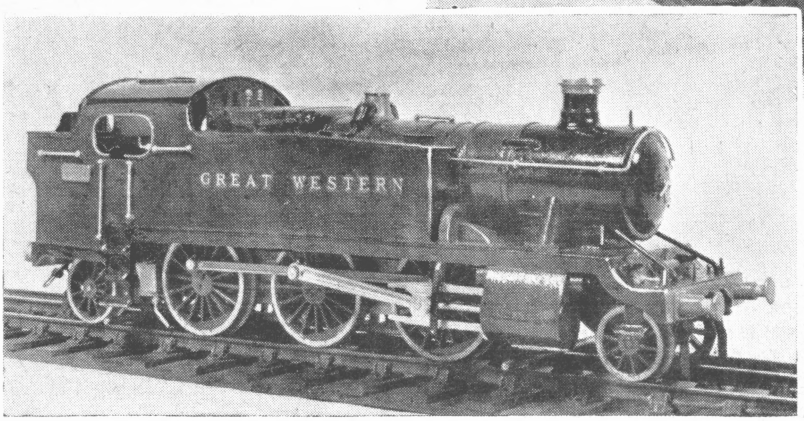
A general view from above of the "O" gauge Great Western 2-6-2 "Prairie" tank locomotive

cut from the sheet and wire soldered round the edge to form the fluting. This was filed flat and a disc fixed to each end (another fiddling job, but well worth while). Slide bar brackets were made from short lengths of steel rail shaped to the right contour.

Sand boxes are also a characteristic feature of this engine and should be modelled carefully.

This engine gave me a great deal of pleasure during construction and was worth the trouble.





Above—A goods train headed by the "O" gauge "Prairie" tank locomotive, and left—another view, showing more details

My Gen Book

By Michael Leigh

TO very many I may be writing about the obvious, but to many others I may be able to start a spark, whilst, even to those who already possess a gen book, my very, very simple one may offer just one germ of an idea to complete what is already 99 per cent. perfect.

First, my idea of a gen book is a book one compiles to further one's knowledge or ability in the realm of model railway construction. We all have our own ideas how this should be done, which brings me to my second point: my own book.

This is a standard, stiff-backed exercise book, feint ruled all pages, of a good thickness, something like 100 sheets giving 200 pages. This is divided into 13 sections, the book being page numbered from one upwards. My 13 sections are:—

(1). Site, route, layout, etc. (2). Baseboards and foundations. (3). Electrical gear: controls. (4). Track. (5). Signalling. (6). Track plans. (7). Locomotives. (8). Coaches. (9). Wagons. (10). Fireside buildings. (11). Scenery. (12). Scales—model/prototype. (13). Miscellaneous—blueprints, etc.

I have tried, as far as possible, to assess the proportion of the importance of one over another and allocated pages accordingly, rather than having even sections throughout. Into these sections I either write or sketch anything of interest I may want for future reference and usually I adopt the following procedure:—

Information found in books, magazines, etc., is (a) relevant parts copied out exact, if the source of information is not going to be readily available again, or (b) name, date, page, etc. jotted down, if it is readily available.

In the case of prototypes, these are usually roughly sketched and dimensioned on scrap paper or notebook (which should always be carried by modellers) then transferred to the gen book. If the item concerned is likely to remain in situ for some time, easily accessible when wanted, and so on, then a note where it is to be found is sufficient.

Others items which I put in the book are—names and addresses of any fellow modellers, or non-modellers, who specialise and are likely to be able to help on any particular subject, e.g. I have jotted down a few L.N.W.R. experts. Names and addresses with meeting date of clubs in areas where I am likely to visit. Periodic progress of my railway.

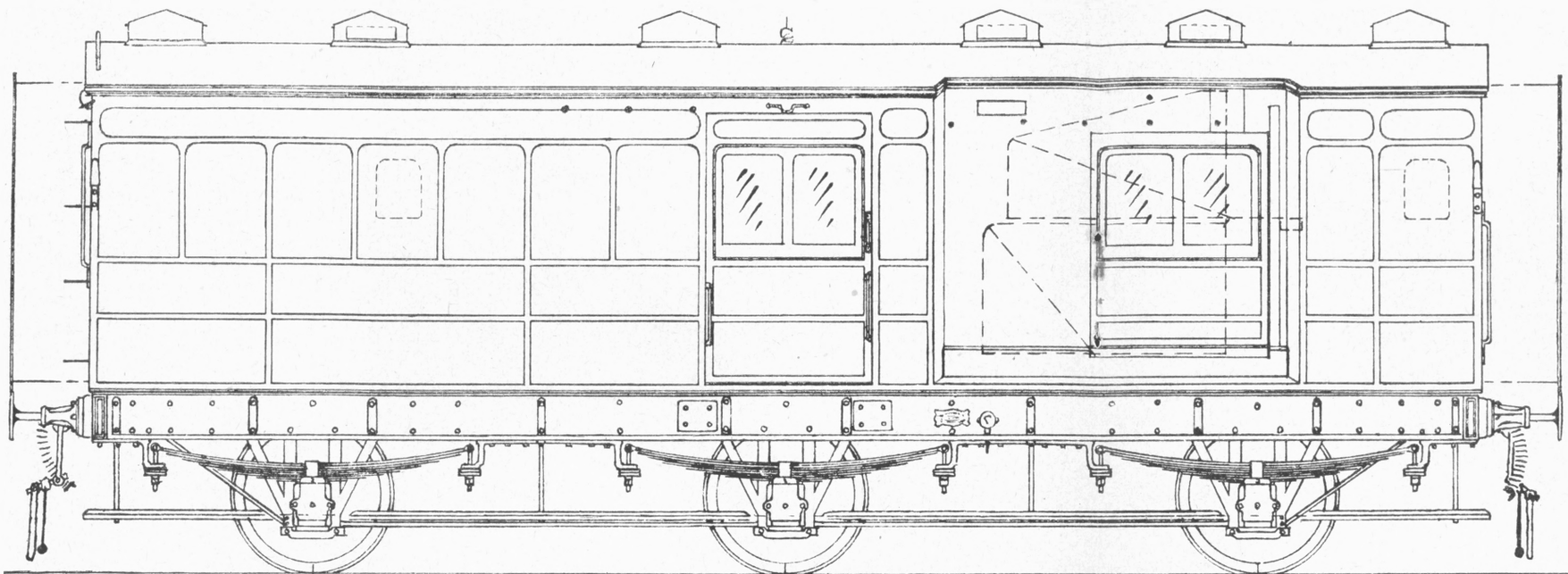
At the moment I am not constructing a layout, but the full history is written, station plans drawn and matter accumulating for my Aberdavon line, so that I have plenty of material to start upon already.

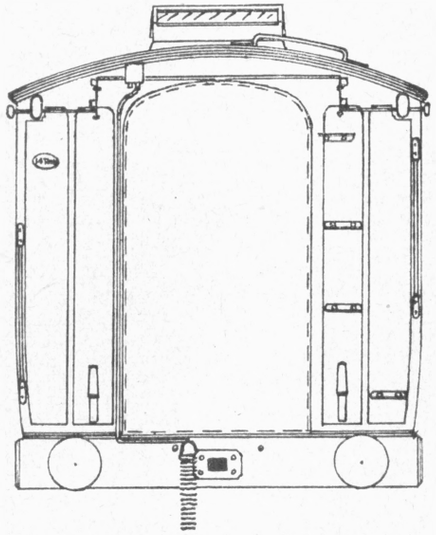
In making up a gen book, one has to incline to a programme; it is senseless to make copious notes and sketches of things that one only may want; only put in things that are almost sure to be of interest, or that are likely to be lost for ever if not noted at any particular time. For instance, I never jot a note down about most of the drawings which occur in the model Press of vehicles, unless it is a type that would be likely to be seen on the Aberdavon line at any stage in its history. It is, of course, possible to cross index and elaborate to an amazing degree, but I think this is unnecessary; if one is not careful one finds that the compilation and keeping up to date of the gen book becomes a full-time job and there is little or no time for modelling. In my opinion a dozen or so headings to suit oneself are all that are necessary—for instance, under wagons, if you want to check up a detail you know you put down a few years back, it is not a day's job to glance quickly through the section until you find it.

I think the key to any gen book should be "simplicity and brevity."

G. & S.W.R. POSTAL SORTING VAN

Drawings, photographs and description
by Iain R. Smith



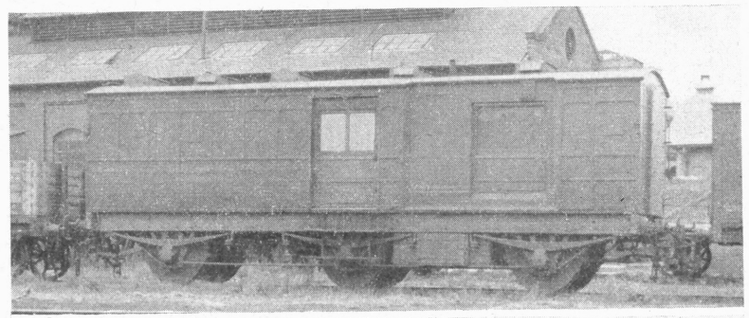


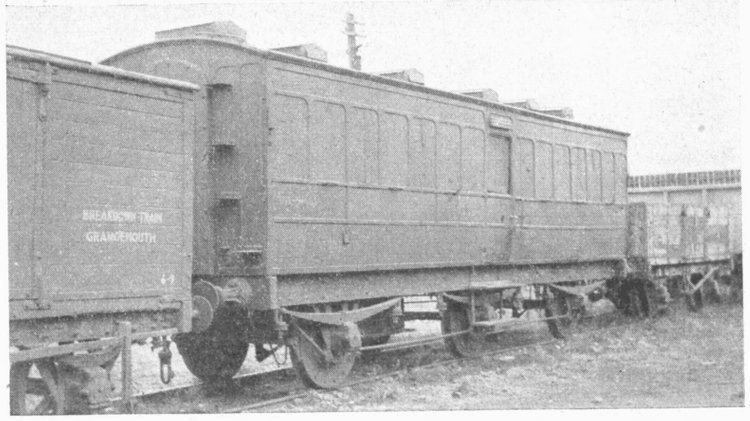
THE Glasgow and South Western Railway appears to have had two vans of this type built in 1891 and two sorting vans without the mail apparatus, and with another wide door in its place, but otherwise similar to the one shown. Length overall was 34 ft. 6 in., over body 31 ft. and wheelbase 21 ft., height to top of roof camber 11 ft. 9½ in. and body width 8 ft. There is an error in the drawing in that the distance of the two middle rooflights from the centre-line should be transposed. Presumably the hoods on the ends of three of the rooflights are ventilators. All the coach drawings in this series are made from measurements of actual vehicles and are generally shown as at the date of measurement with only the most obvious alterations disregarded, such as crude tongue and groove panelling repairs.

This actual vehicle is still in use as a tool van and the mail fittings have been stripped. An outline of the position of the net framework in the closed position has been shown, and although the outline has been dimensioned from a Highland coach, all the Post Office equipment on mail vans appears to have been to a standard Post Office specification, so that it may be taken as reasonably accurate. The wide centre door has obviously had a mail dropping arm on each side, the rectangular marks on the solebars showing where the plates carrying the supports to the quadrants have been. The vestibule connection is provided for in a central position.

The dotted outlines on the fourth panel from the left and end panel on the right-hand ends of the drawing of the apparatus side are where patches have been nailed on. Presumably these patches cover holes caused by removal of lamps. On electrically fitted coaches the circular lamps near the apparatus to serve as a warning to ground staff are familiar, and old photographs will show details of what I take to be oil lamps shining downwards and well hooded to avoid draught.

The transverse rooflights should make this a fascinating and unusual model, and in view of the few window holes, one which would be fairly easy to make.





Coaches from Card

B. H. Bunce gives his method of making these items of 4 mm. scale rolling stock from this useful model maker's material.

ESSENTIALLY, the method to be described is one in which the sides and roof of the coach are made as a unit, thus eliminating any bad joint between them. It is more applicable to modern stock and would need certain modification to be used for clerestory roofs or even curved-ended roofs. Bow-ended coaches present no difficulty. The cost of construction is very low, the body-work costing around 1s. Lithographic sides are, to me, very valuable, since they eliminate the lining problem. Their disadvantage, unless one is prepared to mutilate them, is being limited to a few designs. Since I like sets of coaches of similar design I am quite prepared to use lithographs.

Stages in construction

(1) Decide on the cross-section of the coach required and make a solid coach body about 1½ mm. under the dimensions of the coach end, and amply long enough. A plane and glass paper will readily do this. If necessary, check to the width of each card after the first to allow for the curvature.

It is advisable to cut test strips of card and wrap them round the curved former to decide the difference in width of adjacent layers.

Glue the inner two layers together. If you use a warm glue, e.g. Croid, the card will readily bend to the shape of the former. Bind with a 2-3 in. bandage and leave to dry. On removing the bandage and former you will have an extremely strong card shell which retains its shape. Shellac the inside now except for the strip about ⅜ in. wide along the bottom of each side. This is where the coach body will be glued to the floor. Do not worry if you forget—if you paint a shellacked surface with a flat paint it will take glue well. If you want another primary layer, add it now, glueing and binding over the former as before. Croid is a glue that allows the card to be slid into position before binding.

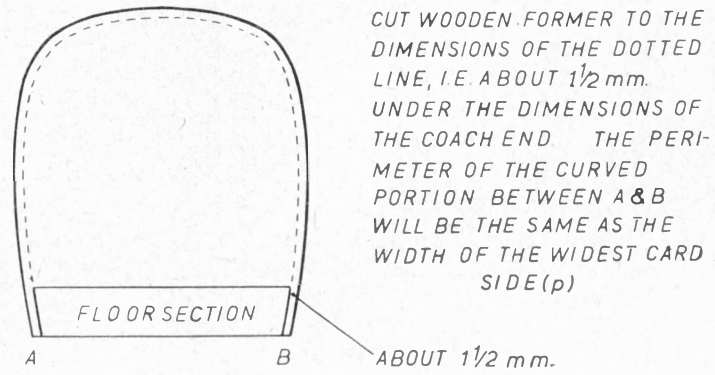

CUT WOODEN FORMER TO THE DIMENSIONS OF THE DOTTED LINE, I.E. ABOUT 1½ mm. UNDER THE DIMENSIONS OF THE COACH END. THE PERIMETER OF THE CURVED PORTION BETWEEN A & B WILL BE THE SAME AS THE WIDTH OF THE WIDEST CARD SIDE (p)
FLOOR SECTION
A
B
ABOUT 1½ mm.

FIG. 1

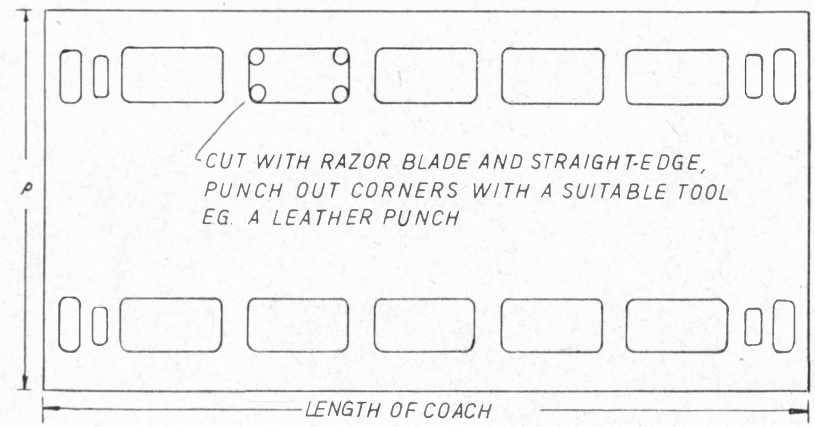


FIG. 2

with a card template along the wooden block to ensure the true cross section.

(2) If you are using a lithograph sheet, cut out the windows now, using a razor blade and straight-edge. Cut the corners out with a leather punch or similar tool. (Even if you are not using litho sides cut out the final side from thin card.) This will be used as a template to get the windows correctly located.

(3) Cut two (or three, depending on thickness) layers of card, of length equal to the coach length and width equal to the perimeter of the wooden block, excluding base. Add 1-1½ mm.

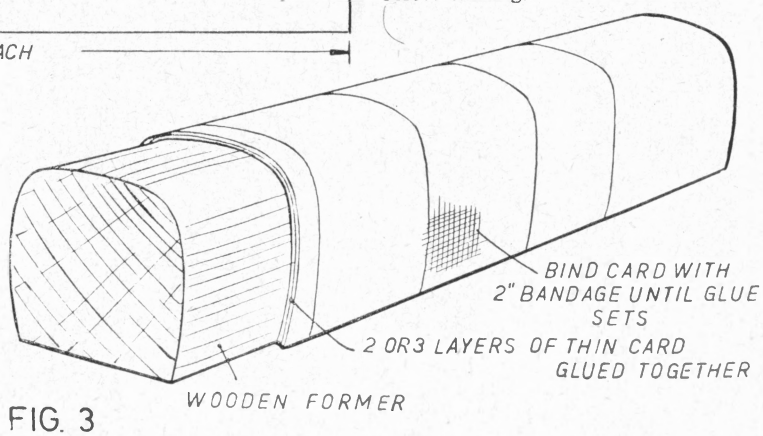
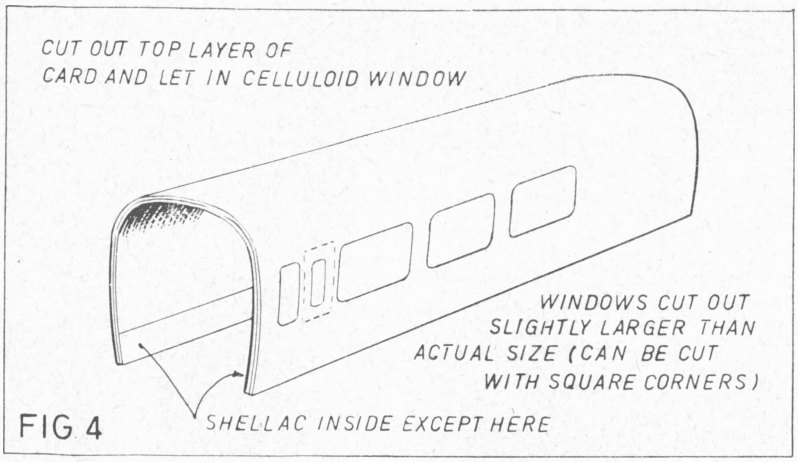


FIG. 3


CUT OUT TOP LAYER OF
CARD AND LET IN CELLULOID WINDOW
WINDOWS CUT OUT
SLIGHTLY LARGER THAN
ACTUAL SIZE (CAN BE CUT
WITH SQUARE CORNERS)
SHELLAC INSIDE EXCEPT HERE
FIG. 4

(4) Use the coach side or litho sheet to mark out the position of all windows on the shell. Cut out the windows slightly larger than true size, using the wooden former and a cutting knife or a leather punch to "nibble" out the majority of the card, shellacking the edges and removing the "whiskers" with a small file. If you wish to recess the door windows, cut out the top layer of card slightly over size and remove. Glue a celluloid Perspex window in so that it is flush with the outer surface. Paint the inside of the shell and the inside edges of the windows now.

(5) Glue card strips to the sides and a card strip roof to within 2 mm. of the windows. Bandage on former to do this. Glue in strips of celluloid for the windows, leaving no gap except at the recessed door windows. After glueing, the celluloid must be flush with the card. Trim card or celluloid if necessary.

(6) Using the former again, bandage and glue the final side. If you have difficulty glueing to celluloid, either roughen it or paint it with a flat paint. Do not glue on the litho side yet.

(7) Cut a wooden floor about $\frac{1}{4}$-$\frac{3}{8}$ in. thick and $\frac{1}{8}$ in. less in length than the length of the coach. The section of the floor is indicated in Fig. 1. Slot the floor with a tenon saw, where the partitions will be and cut these either from thick card or from $\frac{1}{16}$ in. wood sheet. Trim to the correct cross section but do not worry about being too particular. The partitions do not have to support the roof. Add corridor details (if necessary) and add any other inside details that are required—seats are the only things that are really visible, even through large windows. Make them from balsa blocks. With the floor complete, paint all the inside a dark matt colour that will not reflect light.

Although it may not be correct practice, it is far simpler to make the sole bars integral with the body work, and to do this glue strips of $\frac{1}{16}$ in. wood along the floor both at the ends and sides.

(8) Underframe details can be added to the floor of the coach before the shell is finally fixed. For truss-rods I use 18 or 20 S.W.G. copper wire, hammered square in cross section. Accumulator boxes are blocks of balsa, as are air reservoir tanks, dynamos, etc.

Bogies of any desired pattern can be used. Mine are made up from thin copper sheet sides drilled for axle holes and spaced by a thicker brass plate soldered across the middle. All details are built up in card, springs, axle boxes, etc., glued to the copper sides.

(9) Slide the outer shell on to the floor and glue into position. Cut the ends from $\frac{1}{16}$ in. sheet and pin and glue these into position. Notice that the ends will also form the buffer beam and will be glued not only to the card side and floor but also to the $\frac{1}{16}$ in. strip across the floor. Bow ends can be formed using thicker wood and sanding to shape. Glue card over the ends—it will take paint better than wood and show no grain—and trim to shape when dry.

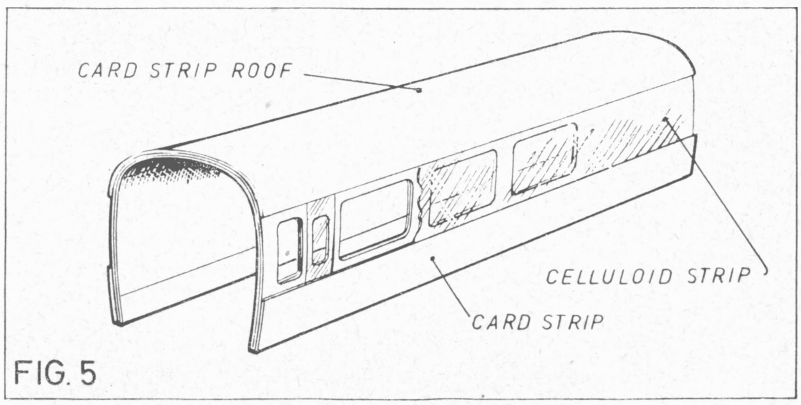


FIG. 5

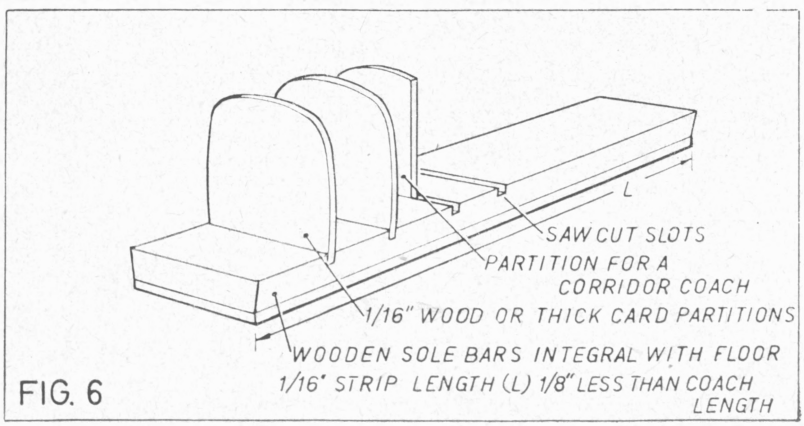


FIG. 6

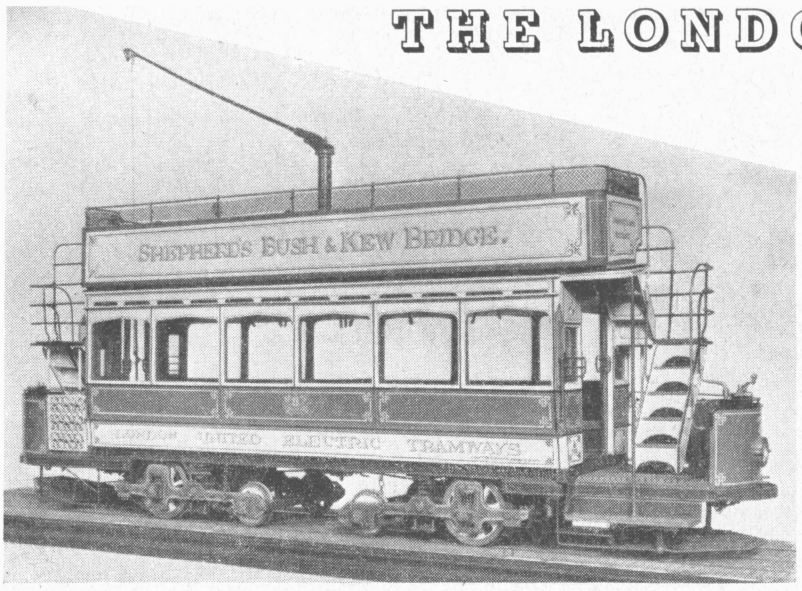
(10) Corridor connections can very easily be made from folded black paper, e.g. photographic backing paper, in a manner identical to the one described by L. E. Carroll in the *Model Railway Constructor* for May, 1951.

(11) Add the litho sides (or paint the sides) and paint the roof. Rain strips can be made from card. Add roof ventilators. Couplings can be added to suit tastes.

(12) **Cost.** 4 pairs coach wheels (Nucro), 2s. 8d.; 1 set E.R.G. buffers, 1s.; litho side, 7d.; couplings, 3-link, 6d.; celluloid scraps, card, wood base, wood strips, etc., paint, and odds and ends of Cu wire, etc., glue, 1s.—Total 5s. 9d.

THE LONDON UNITED ELECTRIC TRAMWAYS

By
F. J. Roche



L.U.E.T. Type Z, 1901. A "red" car, ¾ in. scale model by R. Elliott

IN the MODEL RAILWAY NEWS there has recently been comment about the London United Electric Tramways Co. Ltd. and their cars. Mr. Tustin's drawing (November, 1955) was more or less correct for the type of car depicted, but there were three types of open top cars, all differing in minor details, particularly in the bogies, dashes, and, of course, the colouring. The original type of car was type Z and was built by Messrs. Hurst Nelson & Co. Ltd., who built over a thousand cars for London, mostly for the L.C.C. The design was Sir Clifton Robinson's and was a bogie version of those he designed for Bristol and many other systems prior to 1900. A feature of all Robinson's cars was the open platform He liked his motormen to have plenty of fresh air ! Of course, the distinguishing feature of the L.U.E.T. cars was the staircase, with a half-way landing.

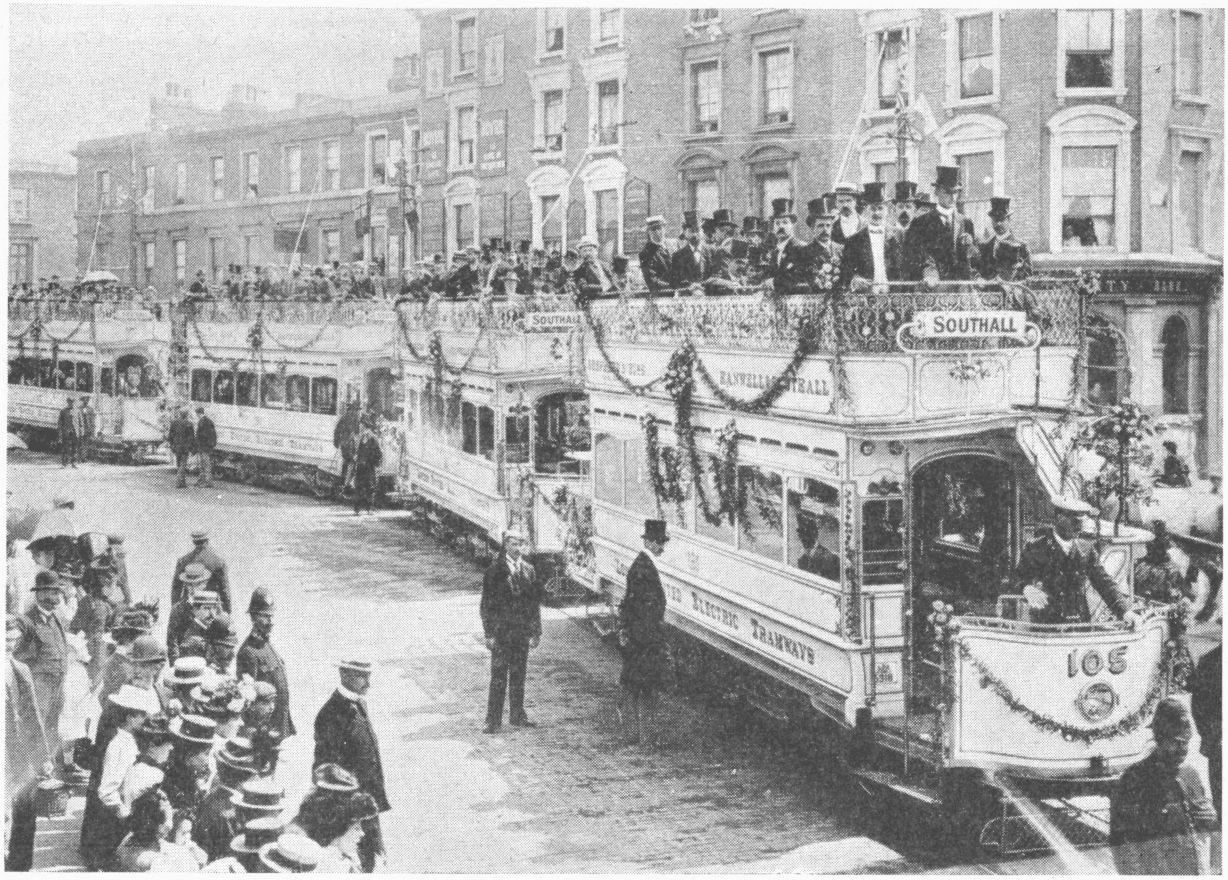
The ventilator mentioned by Mr. Rourke in his letter (April, 1956) was in fact a three-colour light indicator over the bulkhead window. In those days routes were distinguished by their colour, a relic of the horse trams and buses which were painted in distinguishing route colours and which remind us of the large amount of illiteracy in those days; most working men could not read or write.

The electric trams had larger wheels than the horse trams they replaced, to provide sufficient ground clearance for the traction motors, and the lifeguards were generally about 3 to 4 in. clear of the road. The track to the underside of the solebar measurement was generally about 2 ft. 6 in. and the footstep about 9 in. clear. Four-wheeled trams had wheels of 30 to 33 in. dia. and bogie cars about 28 to 30 in. dia.

The original cars of the L.U.E.T. were very ornate, both inside and out. The seats were upholstered, mostly in what was then known as Utrecht Velvet, there were curtains and pelmets at all the windows with the little Edwardian "Bobs" dangling from the pelmets. This can be seen in the photograph. Unfortunately, the upholstery had to be removed in later years, owing to the large number of non-paying passengers that got into it—a reminder that our forefathers were not so clean in their habits as we are !

The cars were painted in three styles, according to their route, namely white, blue and red. The photograph reproduced of the opening of a "white" route, Shepherds Bush-Southall, also shows the cars in their original condition, with a revolving type of indicator which only showed four routes. This was later replaced with a roller blind type, as shown in the photograph of a type X car taken in service some years after the opening. The Southall route was, of course, later extended to Uxbridge. In passing, it is as well to remember that the original L.U.E.T. Bill envisaged routes to Staines, Sun-

L.U.E.T. Type X, 1901. A "white" car. **Photo taken by F. W. Chubb**



Toppers, Boaters, Roses and a Free Ride! Opening of L.U.E.T. Southall route 1902. Four type X cars

bury, and Hook, but these were never built and the powers were allowed to lapse. Similarly fated was the extension to Cranford.

Although the L.U.E.T. was always a go-ahead company, many of its routes were purely rural, never paying their way except, perhaps, in the summer when the populace went for a ride on a tram in the country, much as we do nowadays in a motor coach. The final act of the company was to design a most revolutionary tramcar, later known as the "Feltham" type, because they were built by the Union Construction Co. of Feltham, Middlesex. They also designed the first trolley-bus to run in London, and these were nicknamed by the staff "Diddlers," because the fronts were designed to resemble a motor-bus. One of these has been preserved by the former L.P.T.B.

A very beautiful model of one of the former L.U.E.T. type Z cars has been built by Mr. R. Elliott of Abbey Wood, the Models Secretary of the Tramway Society. This model is well known by now, as it has been on exhibition in several places, commencing with the "Festival of Britain" for which exhibition it was built, and it was recently seen running at the Model Railway Club show in London, along with a model built by myself of a contemporary type of car of the former West Ham Corporation (see page 93, May issue).

In the February 1907 *Railway Magazine* there is an "Illustrated Interview" with Sir Clifton Robson, who was then general manager of the L.U.E.T. and I have this copy, and it is very much treasured. In point of fact, about this period the *Railway Magazine* had quite a lot of articles about tramways, and electric railways. In the January 1907 issue there was an advertisement announcing the amalgamation of the L.U.E. Tramways, District Railway, and G.N., Piccadilly and Brompton Railway into one concern. Thereafter, there were through bookings from the tramways to any part of London. This was by way of being the first transport monopoly in London, and, of course, it grew into the L.P.T.B. during the next 26 years.

The L.U.E.T. was the first electric tramway in London, and its cars are still running in Leeds, to which city the "Feltham" type cars were sold upon final abandonment of trams in London. Some L.C.C. cars are also running in this city, and we hope they are good for many years yet. Tramway enthusiasts have to thank such up-to-date municipalities as Glasgow and Blackpool for proving what a commodious and comfortable ride a tramcar can give.

Our Cover Pictures

Readers of *MODEL RAILWAY NEWS* are invited to submit for consideration photographs which may be suitable for cover pictures. Reference to the covers of recent issues of M.R.N. will give an indication of the type of photograph preferred. If accepted, a reproduction fee of two guineas will be paid on publication.

Prints should be addressed to

The Managing Editor
MODEL RAILWAY NEWS
19-20 Noel Street, London, W.1.

WIRING A REVERSE LOOP FOR SPLIT-POTENTIAL

By H. MARTYN CUNDY

IT is well known that with two-rail electrification, using a single power-supply, the wiring of a reverse loop necessitates the feeding of an isolated section in the loop through a double-pole double-throw switch connected with the point-lever, or otherwise. It is sometimes suggested that this is not the case if the split-potential system is used, provided that the ends of the loop terminate in sections controlled by separate controllers, such as the Up and Down main lines of the layout. Diagrams have even appeared in reputable books on two-rail along the lines of Fig. 1. Here we have a double-track main line, the two tracks being connected by a crossover. and wired to separate controllers. The ends of the tracks are connected by a loop to allow continuous running. With the single crossover shown, all the inherent difficulty of the problem is included.

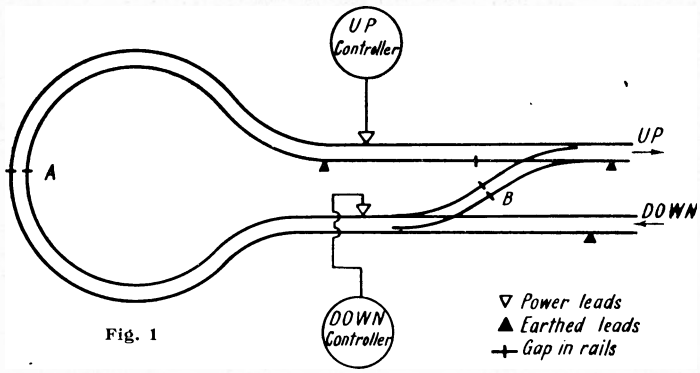


Fig. 1

It might be thought that provided the controllers are set for motion in the same direction when a train crosses either gap *A* or gap *B*, no difficulty will be experienced if a split-potential system is used, but a moment's thought will convince the reader that this will entail opposite settings of the Down controller with the same setting of the Up controller according as the passage from the Down to the Up Section is made *via A* or *B*. However the controllers are wired, at one or other of these gaps the situation depicted in Fig. 2 is bound to arise. Here the central zero (earthed) rail is marked 0. and the rails at potentials above and below this are marked + and —. (The potentials are arranged for continuous motion from left to right.) These rails are connected (*via* the controllers) to the opposite poles of the split-potential power unit. In Fig. 1, for example, this situation will arise at gap *A*.

Now, what happens ? It is true that with properly set controllers a locomotive will move in the same direction on both sides of the gap, but as long as its wheels bridge the gap *both the positive and negative halves of the power unit are short-circuited to earth*. Both circuit-breakers will cut out immediately, we hope, or grave damage could be done in the long run.

This can be remedied in two ways. A short section, fed from a totally independent supply, can be introduced into the loop at the gap *A*. This is cumbrous and expensive. The reader may well feel, as the writer did when this solution was proposed, " I already have two 12-volt rectified supplies in the split-potential unit; must I add a third ? " Posed in this way, the problem began to answer itself. The answer is very simple, but I have never seen it suggested anywhere in print and I believe it may be helpful to others.

In the first place, we must arrange things so that the trouble occurs at *A* and not at *B*. Nothing can be done to cure it in the short space of a cross-over. Besides, there will probably be many crossovers, and only one or perhaps two loops. This means that " normal " running, from left to right on the Up track and from right to left on the Down (Fig. 3), uses different halves of the power unit. This is an advantage as it shares the load equally.

Next, we introduce a number of gaps in the loop, as shown in the diagram. I use four, which gives perfectly smooth transitions, but two or any greater number can be used. The diagram shows three. These gaps are to be left open or connected with short coils of resistance wire as shown. The controllers are now set correctly for motion on both tracks, the one being left and the one being approached, and the train runs smoothly over the loop. There are no reversing switches or other complications and nothing to go wrong. Speed can be controlled by either controller; the other one can be set to " all out."

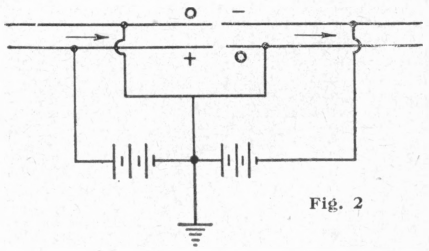


Fig. 2

What have we done ? We may compare it to the introduction of a ladder of " lock-gates " into the potential " hill " down which the train has to pass. At each end of the loop, the right-hand rail is 12 volts higher than the left, but at the further end both rails are 12 volts lower down. This drop is accomplished in a cascade of small steps. The short circuit is limited by the resistances when the outermost of the

(*Continued on page* 219)

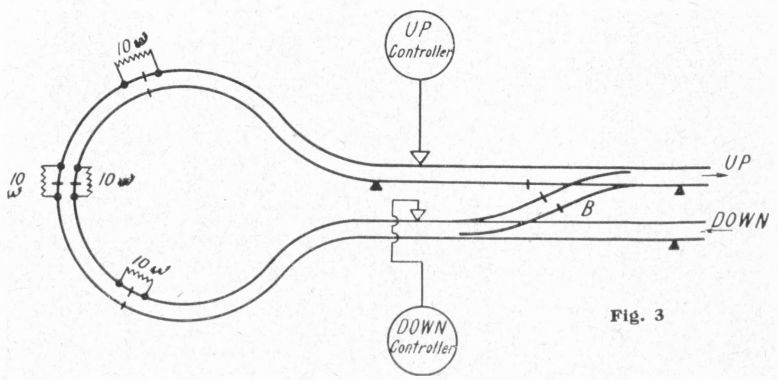
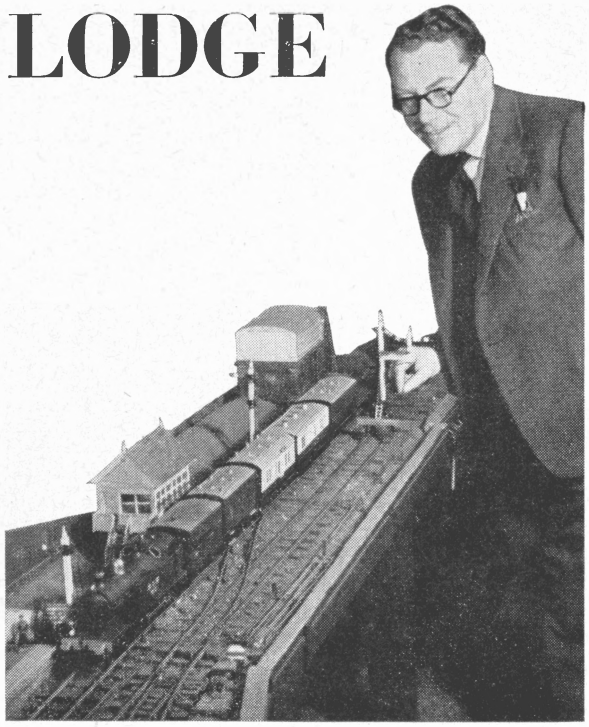


Fig. 3

THE BARTON LODGE RAILWAY

At first faced with the usual problems of location and space, Mr. W. F. Price describes his considered "O" gauge single line layout



Engine No. 1 on a train of vans entering Inveraray

IN the middle 1930s I laid a railway out of doors, but it was only a moderate success due to insufficient care given to its preparation and laying. In 1939, I dismantled this railway and put its many parts into store.

By 1940 I had given a good deal of thought to building another railway, this time in my garage where it would be under cover. A start was made by erecting substantial trestling along two sides of the garage and connecting this with a lift-out bridge-piece to span the double doors at the front. My work bench stood along the fourth side and a door which opened into the rear of my premises giving access to a covered annexe. A line was laid on this foundation and later extended along one side of the annexe, and, very recently, has again been extended by 7 ft. out of doors on to a portable shelf. The layout, then, is hook or "J" shaped in its formation, giving me nearly 60 ft. of continuous end-to-end running. The line is "O" gauge and single throughout its course. I am restricted in some respects for space by having to keep to the walls and not being able to build into the middle spaces of the garage and annexe. Nevertheless, I feel, in the circumstances of location and space, very fortunate in having a layout which serves my ideal, that of end-to-end.

Inveraray—Down goods train passing through

Though no particular railway company was chosen as a pattern to follow, I have instead conformed to a style that might be regarded as one where general practice is observed in its running and so on, and certainly one that is acceptable in model form. Most would regard me as a free-lance. I have tried to capture the atmosphere of the pre-group period of some 40 years ago. The Furness, Somerset and Dorset, Great North of Scotland Railways and the backwater lines of East Anglia have always appealed to me as providing suitable subjects, whether it be in rolling stock or otherwise, for modelling, but I feel that all railways have something interesting to offer in this field. First, I am a railway enthusiast and secondly a modeller, and in this light I have a strong distaste for matters that are unrailway-like.

My line is known as the Barton Lodge Railway and is so named after the neighbourhood in which I live, but is more generally known by my fellow enthusiasts and friends as the B.L.R. which suits me. The names of the stations, Inveraray, Swangrove and Peterbrook terminus are incidental and

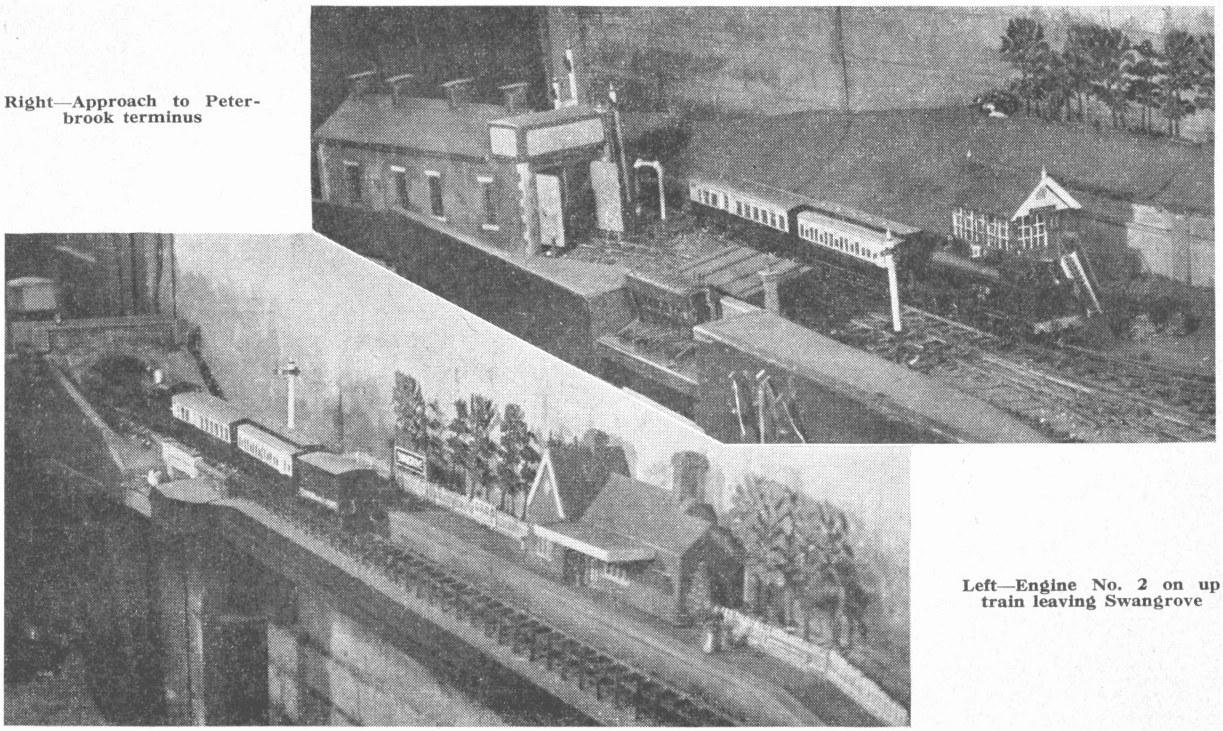
bear no relation whatever to existing places possessing these titles. The line is an ordinary country branch, the like of which may have been found in its day in a hundred places in Britain. It is supposed to connect Peterbrook with a main line at a junction some miles away, but I have modelled only the last (very) few miles of the branch. In the down direction trains first reach Inveraray, a single platform station with run-round loop, and is provided with a small goods yard. Until recently this was the outer end of the line but to introduce a more final note I extended a portable shelf into the garden so that trains now pass out of sight and hearing when travelling in the up direction. Loop roads have been laid on this shelf so that engines may run round their trains and in due course reappear.

Trains leave Inveraray for Swangrove passing Inveraray Box and water tank, then into a cutting, out and over a stream (ripple glass) and into the wayside single platform station of Swangrove. On again, trains bearing to the right and passing on to a high embankment which curves in a semi-circle and leads into Peterbrook terminus.

The embankment is built on to the lift-piece which spans the garage doors. Peterbrook Station is a single platform type with main line arrival and bay road for departure with a stock siding adjacent. Arrival trains' engines escape *via* the combined goods reception and engine return loop road, and adjoining we find the goods train sidings. The single line engine shed is at the end of shunting spur. While the layout here is extremely simple and conventional in design, it satisfies my love of and desire for shunting and marshalling of trains. Buildings appropriate to such a line have been constructed and placed in their respective positions; they call for little comment, though I must mention that the little station buildings at Swangrove were built to the designs and description submitted some years ago by "Precedent," of Grayrigg in Westmorland, and the engine shed is after Mr. John Ahern, and typical of a branch line. The signal box at Peterbrook has been modelled from a photograph of Ollerton Box on the former L.N.E.R. in Nottinghamshire.

In designing the layout as a whole I made my motto "simplicity" and in working to this maxim I have avoided overcrowding and cramping of the tracks as far as possible. This not only gives an air of spaciousness (which is a feature of most country lines) but makes for successful and pleasing marshalling and shunting operations. Intricate point and crossover installations take up so much of our restricted space and can often be done without.

Alas, I am no artist, craftsman or engineer, but just a lover of railways, and as far as the scenery is concerned I am afraid it has appeared in piecemeal fashion. I have been content to cover the embankments and ground with roofing felt substitute and added here and there small patches of cotton wool to simulate rough patches. The whole lot was painted green and a few smears of grey, brown and white brushed on at random. One or two dents in the covering were painted a buff colour and resemble earth that has not become grown over with grass. Railways, fencing and walling has been put everywhere along the boundaries of the line, to comply with the law! The background has in places been lined with flat trees obtained from the toy shops, and these look quite well especially under electric light, when the shadows play a part by making the scene much thicker.

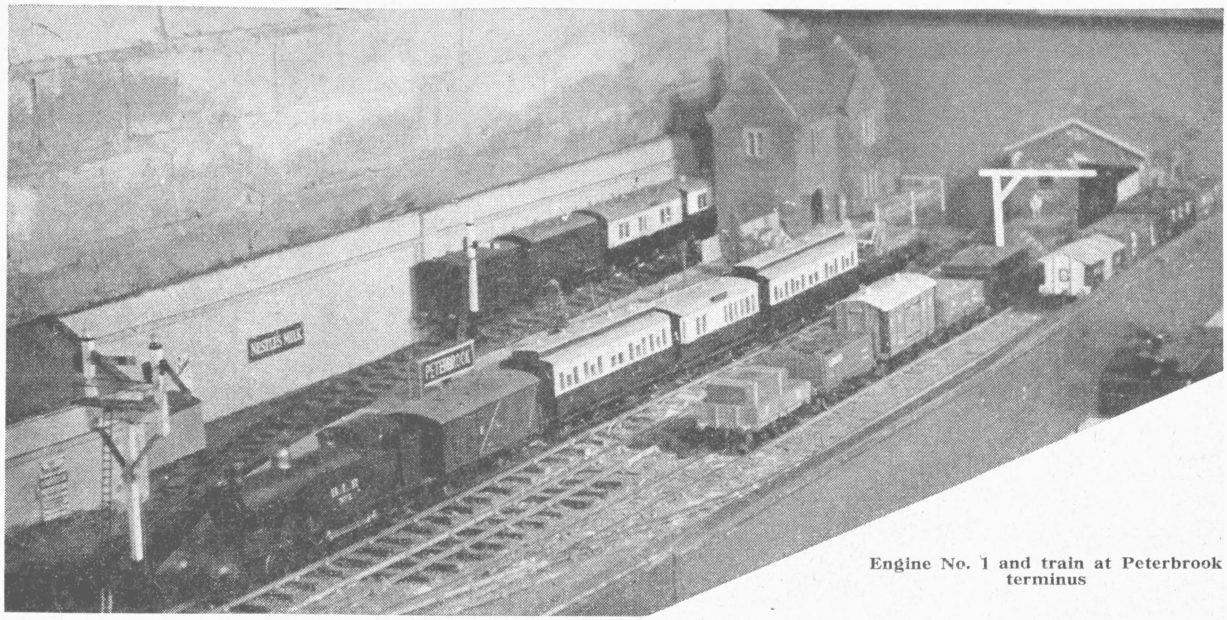


Right—Approach to Peterbrook terminus

Left—Engine No. 2 on up train leaving Swangrove

The approach to Inveraray tunnel has been provided with more embankment since the tunnel was opened out to give access to the extension into the garden. Mileposts and truthful gradient posts have been fixed alongside the line together with gangers' huts and ballast boxes, which appear in suitable places. There is a country type overline bridge before Swangrove Station and two underline bridges in the embankment on the lift-piece. I have not gone beyond the boundary of the line for scenic purposes, though perhaps the treatment of the walls by using posters or painted scenery would improve this side of the railway considerably. There are the arch enemies, dirt and damp, to contend with, which made me hesitate.

Three clockwork-driven tank engines of free-lance pattern run up and down the line. They are respectively a Bing 4-4-0, Bassett-Lowke 0-6-0 and a very recently acquired Walker Reimsdyk controlled machine. The first two mentioned



Engine No. 1 and train at Peterbrook terminus

have had their appearances improved very much by the addition of taller and brass-capped chimneys, brass domes, bright rimmed spectacles and cab-beading, and painted matt black, lettered B.L.R. and numbered 1 and 2. The Walker is employed entirely on goods trains, shunting and station work, and in a word, is a great success. The other engines have proved ideal for this type of line, and provided they are wound up and loaded judiciously, they leave little to be desired in the matter of performance. Electric propulsion, which undoubtably possesses many advantages over clockwork drive, does not appeal to me.

My carriage, van and wagon stock is a miscellany of pre-grouping items. My coaches are all based on prototype design, though painted in a uniform maroon and cream, grey roofs, black undercarriage details and umber wheels, and some of the vans have all maroon bodies. The wagons are all models of vehicles of the times, painted and lettered according to the style of the original company owners. The majority have been built to the plans and descriptions which have appeared over the years in MODEL RAILWAY NEWS and other model periodicals. Apart from one bogie open coach with recess doors, my coaches are six- and four-wheeled, and have all been assembled from CCW kits, and parts. I ousted my bogie stock in preference for the smaller coaches, as the latter take up so much less room and look better at my rather short stations than a few bogies did. Great Western, Great North of Scotland, London and South Western, London Chatham and Dover Railways are among the companies that have been represented. Most passenger trains are run with horse boxes and/or vans for perishable goods and parcels attached. These coaches and vans hold the track quite well when running, but make a clatter, which is not unpleasant to my ear.

The signals are of the standard lower quadrant type and fairly detailed. I am replacing the older ones with much improved models. The line is not over signalled but the essential ones are there, and hardly a movement can be made by engines without signal indications. Ground discs at Inveraray move with the points and thus show the state of the road at a glance to the rather busy operator (especially when visitors are present). Point-rodding cranks and other permanent fitments have been painted in red oxide, and show this part of things up very well.

With the exception of the engines, the work of building this little line, painting, assembling the rolling stock and making of stations has been done at home. The articles written for the model Press and principally MODEL RAILWAY NEWS (for I have been a reader of MODEL RAILWAY NEWS for many, many years) have been read and studied with enthusiasm and interest, while much of the advice and instruction has been made use of in making the B.L.R.

The photographs reproduced with this article were taken by A. Wilkes and Son of West Bromwich.

Wiring a Reverse Loop

(*Continued from page* 216)

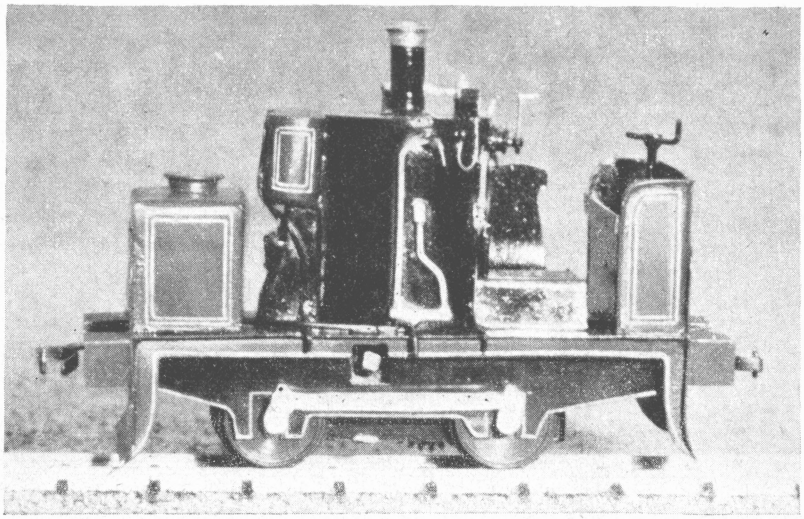
gaps is bridged at either end. In between there is a difference of 24 volts between the rails on open circuit, but as soon as a current is taken the resistances lower the effective voltage. By this means the current taken by the loco is kept constant and equal to the current it would take in normal circumstances with the same setting of the controllers.

The only remaining detail to be settled is the value of the resistances. When the locomotive is in the " cascade " the current passes through one resistance (on one side or the other) at each gap. This must cause a voltage drop of 12 volts. For three gaps and a current of 0.4 amp., Ohm's law gives 10 ohms for each resistance. The " short-circuit " current at the instant when the end gaps are bridged will then be 0.6 amp., which is quite harmless. If several locomotives with different current capacities are to use the loop, either a compromise must be effected, or their currents must be made the same by the use of ballast resistors; a practice which has other desirable features.

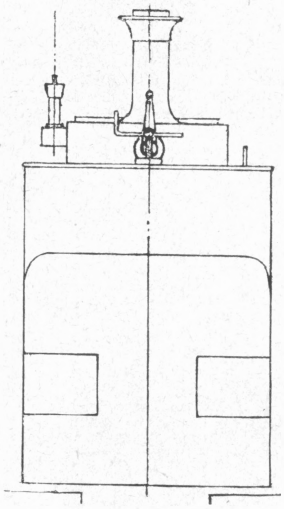
The resistances were open coils of " Eureka " resistance wire, tucked under the baseboard. Radio-type resistors can, of course, be used, but they will need to be of at least 2.5 watts rating. More gaps reduce the short-circuit current, which will be n/(n-1) times the current through the motor of the locomotive when n gaps are used. Increasing the number of gaps also reduces the slight variations in current which may occur when a pick-up wheel actually crosses the gap. In practice, no appreciable " jerk " in the motion occurs through this cause when using four gaps; no one would suspect that it was not a normal section of 12-volt two-rail track.

A 'De Winton'

By D. G. ATTWOOD

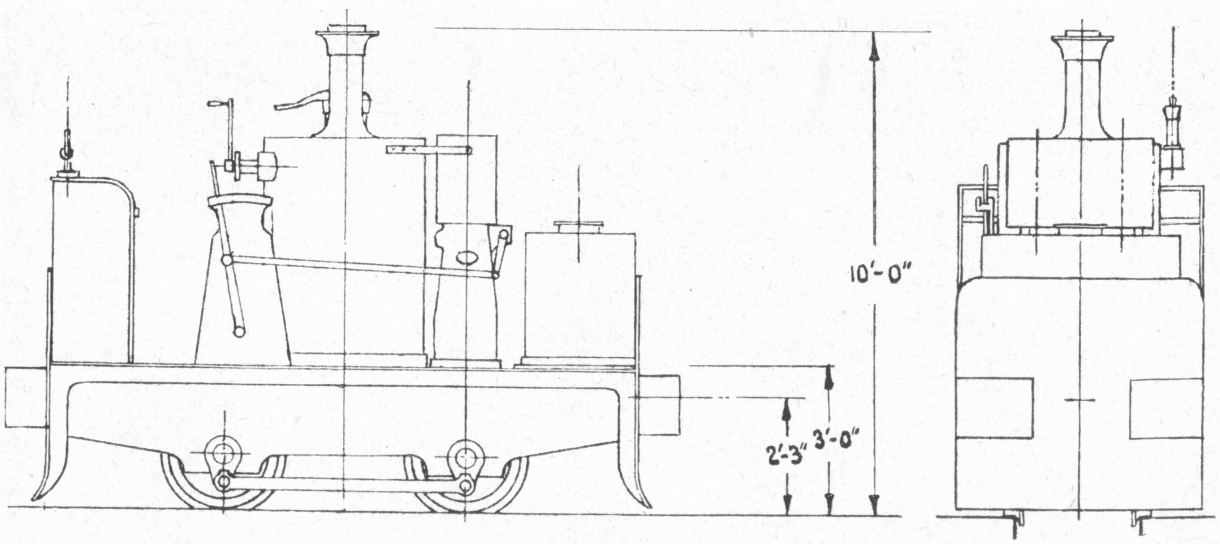


BEFORE I describe my vertical boiler locomotive, just a few lines about the Lanyon Valley Railway on which it is to work. This line, which at present exists mainly in my mind's eye and partly on paper, is to be a 3 ft. gauge mineral line, situated in Cornwall, carrying a light goods traffic and also providing a passenger service. The De Winton is to play the part of one of the early goods locos of the line, now superseded, but retained as spare engine and employed as a shunting engine, or occasionally to pilot a heavy goods. She will spend much of her time standing outside the shed and, I hope, looking decorative.



The construction of the loco was undertaken by Messrs. Eames of Reading in close contact with myself. I obtained dimensions of a 2 ft. gauge De Winton from Mr. Boyd's " Narrow Gauge Rails to Portmadoc " and also managed to get some photos of similar locomotives from Locomotive and General Photographs. From these a drawing of a 3 ft. gauge loco was prepared, the measurements being increased as necessary to suit the greater gauge and size. Since the model was completed I have discovered that De Winton's employed inside frames for locos of 3 ft. gauge and over; but as most builders of industrial locos worked only to very general rules and built each locomotive as an entirely separate job, mine may be considered as one of the builder's oddities. In any case, I think that the outside frames add greatly to the general effect of the model.

The loco is built to $\frac{1}{4}$ in. scale on a gauge of 16.5 mm., and the mechanism is clockwork, which, for various reasons, I prefer. Originally, I intended her to be purely a dummy but as the photograph shows she is now fitted with a Minic motor which was about the only thing that would fit. This, of course, is non-reversing, and I hope in time to have a proper reversing mechanism constructed to fit the frame. At present the loco will propel five standard gauge wagons at a realistically low speed, but if more are added she begins to slip. As she is not specially weighted, this is quite a good performance, and in any case she will never be called upon to do any heavy work.



Mounting Made Easy

By E. C. EYRE

AN INCREASING NUMBER OF LAYOUTS ARE MAKING USE OF SHEETS OF CUT-OUTS FOR SCENIC ITEMS. HERE IS A METHOD TO ENSURE PERFECT MOUNTING EVERY TIME.

ALL of us who make lineside models using paper patterns, or printed brick paper and the like, have had trouble from time to time sticking the patterns to the cardboard, whether we use gum, glue or rubber mounting. Especially is this the case when we are using strawboard for our model, as this support absorbs so much moisture from the adhesive.

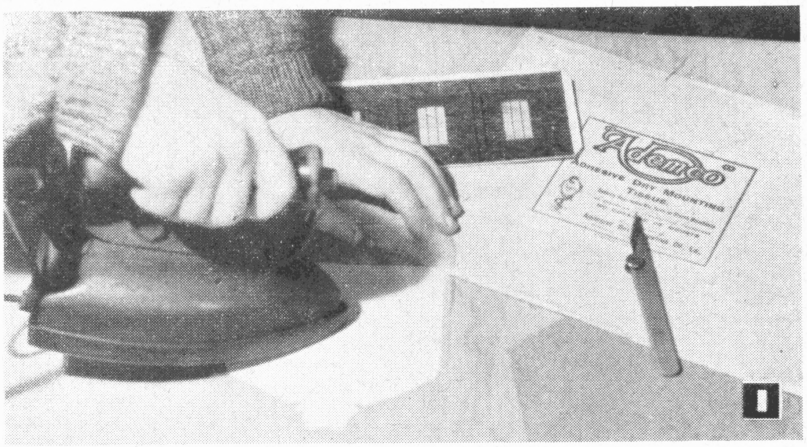
Provided, however, that we are mounting our patterns flat (i.e. before the model is made up) we can end our troubles by taking a leaf out of the photographer's book and using dry mounting tissue. Anything stuck with this tissue will remain perfectly flat and fixed for all time.

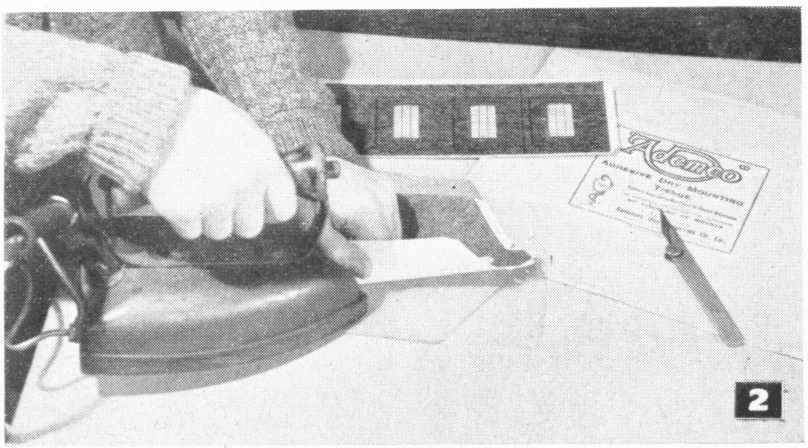
The dry mounting tissue itself consists of a sheet of very thin paper coated on both sides with a shellac compound. It is very simple to use, requiring only the application of heat and slight pressure, the easiest way being with the domestic iron. Because there is no moisture involved, the pattern is not likely to cockle or wrinkle.

The procedure is as follows: the paper pattern, trimmed roughly, but not exactly, to size, is placed face down on the work bench and a piece of dry mounting tissue, slightly larger is placed on top. This is then tacked to the back of the pattern by stroking a cross in the centre with the tip of a hot iron.

Next, the pattern with the tissue adhering to it is turned face up, and trimmed slightly so that no tissue overlaps the edges. Now place the pattern on to the cardboard to which it is to be stuck and fix it in place temporarily by tacking the tissue by four corners to the board. This is done by raising each corner of the pattern free of the tissue in turn and touching the tissue with the

(*Continued on page* 223)





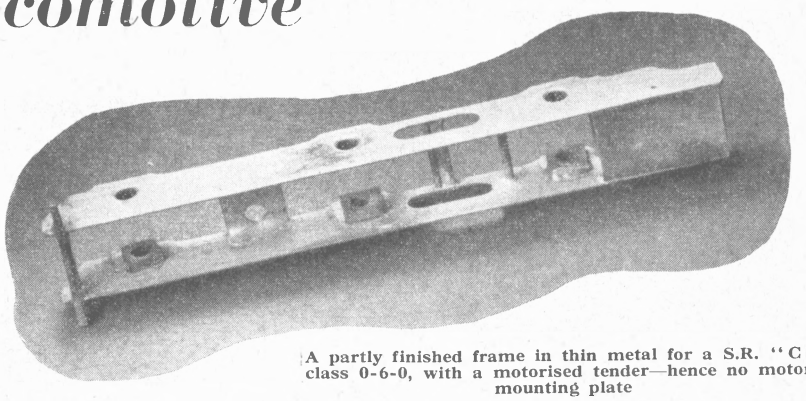
(1) Tacking the dry mounting tissue to the back of the pattern, using the toe of the iron. For the purposes of illustration only the tissue has been left square, so that it is easily seen. As explained in the text, with a shaped pattern the tissue would be cut to shape previously

(2) Tacking the pattern to the cardboard support by lifting the corners of the pattern and touching the tissue against the board with the toe of the hot iron

(3) The final mounting. The pattern-tissue-cardboard "sandwich" being pressed with the hot iron (between 150-180 deg. F), gently but firmly. Note the clean paper over the pattern to protect it

Making Locomotive Main Frames

By D. A. Williams



A partly finished frame in thin metal for a S.R. "C" class 0-6-0, with a motorised tender—hence no motor-mounting plate

MANY modellers are capable of knocking up the topworks of a locomotive, but are put off by the difficulties of making an accurate chassis without the aid of an expensive drill on a stand. The Metropolitan Junction Locomotive Works suffers from the same lack of precision drilling machines, and the following method has been used to make an accurate chassis using only simple hand tools.

The usual frames used in four-milly are made from $\frac{1}{16}$ in. hard brass which if scaled up to full-size would result in a plate 4 in. to 5 in. thick. Just imagine the result of dishing this up to the lads at Swindon or the like. They would probably ask if it was an order for atom bomb-proof tanks. Therefore much thinner metal can be used for mainframes, provided plenty of cross-members are employed, 26 gauge nickel-silver is quite strong enough and the first move is to cut two pieces a little larger than the finished frame (piercing saw for this job, please, to avoid edges like the waves at the seaside). It is an advantage to cut one piece a little larger than the other and to secure the two pieces together with tiny spots of solder as in Fig. 1. This completed, the frame can be accurately scribed out on one side and it is a good idea to include such details as spring hangers as shown in the inset on Fig. 1. Do not run away with the idea that being behind the wheels they cannot be seen, for it is this type of detail that gives a model the massive and weighty touch of the prototype. The critical dimensions are, of course, the wheel centres, and great care should be taken to centre pop these in the right places. The pop marks should be measured after popping, and if inaccurate it is worth while scribing the frames out again on the other side. Small inaccuracies can be corrected by drifting the punch, i.e. holding it at an angle and gently tapping with a hammer. All should now be ready for drilling the axle holes and no attempt should be made to drill these full-size in one go. A small pilot hole is drilled first and all three (for six-coupled) tested for "all in line." If O.K. the final clearance size $\frac{1}{8}$ in. drill can be put through. Do not use old drills with battered points for this job, or the holes will wander like a country lane. It is really worth while keeping a special sharp drill for this job alone. The two locating holes *A* and *B* (Fig. 1) also have to be drilled and should be a tight fit on any odd piece of rod from the scrapbox, say about 3/32 in. All holes having been drilled to your satisfaction, the frames can be cut out with our old friend the piercing saw. Incidentally, I often wonder how many derailments blamed on the long suffering track are really due to locomotives with the front axle running in a different plane to the back.

A snag rears its ugly head at this point, for if the frames are sawn without a break all the way round they will fall apart before the final cut is made. Therefore, when the first edge has been cut, a few blobs of solder must be applied to the freshly cut edge to hold the lot together while the second edge is sawn. All sawing completed, the two sides are parted with a hot iron and the pair cleaned up with Swiss files and emery. It is best at this stage to mark the position of the motor mounting-plate if required (motors with a gearbox like the 7-pole Romford can be allowed to float) and this can be done by mounting the wormwheel on a piece of $\frac{1}{8}$ in. rod in the axle hole, laying the motor with worm in mesh on the frame and scribing along the underside of the magnet. Allow for the mesh to be on the tight side, as the motor can always be jacked up with packing-pieces to secure quiet running. If EM is the scale used, the motors will drop between frames, but for 16.5 mm. gauge it may be necessary to cut pieces of the frames away.

The stage is now set for operation 2 and for this a piece of wood is required as thick as the distance *between* the frames. Note that as the frames are thinner, this will be greater than the normal commercial frame spacer. Make the frames as wide as possible, for this gives a better bearing, but if you are trying to run Pacifics round the gasworks sidings, a bit of play behind the wheels is essential. Fig. 2 should show the shape of the wood required, which, of course, will vary with the type of locomotive. Select a piece of wood that is really flat and square and cut away pieces with a saw to allow the locating-rods *A* and *B* to be soldered in. Sections will also have to be cut away behind the axle holes, and although the diagram shows U-shaped sections, three large holes drilled with a brace and bit will do just as well. The wood block prepared, the two frames should be lightly screwed on through the frame-lightening holes (see Fig. 2 again). This is best done by screwing one side

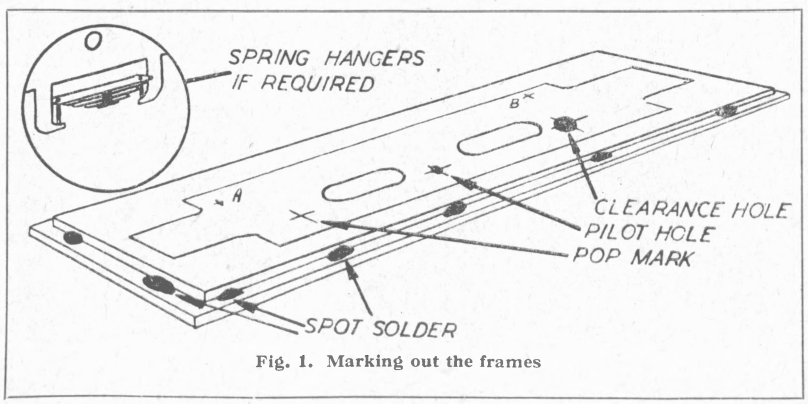


Fig. 1. Marking out the frames

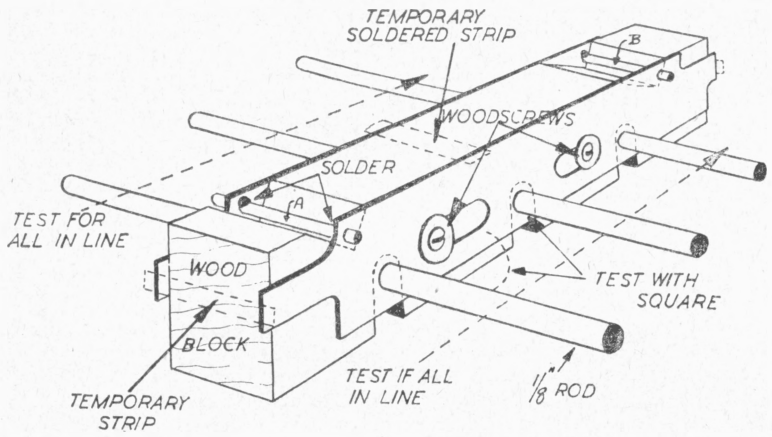


Fig. 2. Setting up the frames

on first, inserting the locating rods *A* and *B* and then screwing the second side. Three pieces of $\frac{1}{8}$ in. rod about 5 in. long are next pushed through the axle holes. Now for the lining up process on which the good running of the locomotive depends. The rods should be moved about until they are all in line on both sides and all at right-angles to the frames. Any error in alignment is greatly magnified at the end of the long rods. When everything is nice and square, the locating-rods can be soldered in and temporary strips soldered on the ends and top to hold the lot in alignment for phase 3.

The wood former should now be removed by undoing the screws and sliding it from between the frames, taking care to avoid any undue pressure that might cause distortion. At this stage I usually manage to drop the lot and have considered working cross-legged on the floor to reduce the distance vital pieces have to fall. Another raid on the scrapbox should produce a piece of brass or nickel silver about 20-gauge and this is cut in a strip as wide as the distance between the frames. Pieces are chopped off (square ends, please) to form strengthening cross-members, as in Fig. 3. The more of these pieces that can be soldered on the better, and a box-like structure should be aimed at, but do not forget in your enthusiasm to leave room for the motor and bearings. The latter are best made from a piece of phosphor bronze strip and I think mine ($\frac{1}{15}$ in. thick) was obtained from K's. It was $\frac{3}{4}$ in. wide, and 12 in. will produce dozens of bearing blocks. These blocks should be about $\frac{3}{8}$ in. square with, of course, a $\frac{1}{8}$ in. hole drilled in the centre. Now to fix the bearing blocks, and this is best done by locating them during the soldering, on a $\frac{1}{8}$ in. drill (another glance at Fig. 3 will explain). Put one on at a time and solder round the edges of the block in case the drill gets fixed, for a $\frac{1}{8}$ in. drill makes a poor driving axle. If any $\frac{1}{8}$ in. bore hard brass tube comes to hand (I have had a bit of unknown origin), this makes a good bearing for

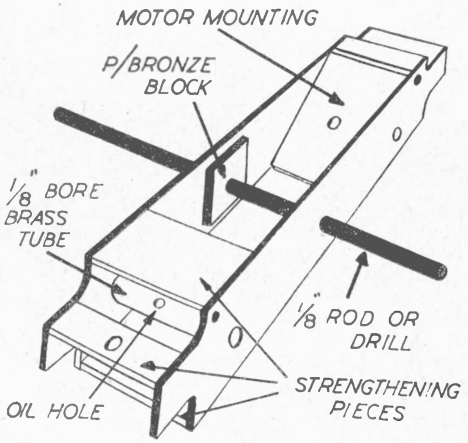


Fig. 3 (right). The final assembly of the frames

trailing axles and is a boon if the clearance under the motor mounting plate is a bit limited. Both types of bearing are shown in Fig. 3 and the brass type is fitted as before, mounted on a $\frac{1}{8}$ in. drill during soldering. A small refinement of great value is an oil-hole drilled in the centre of the tube before assembly. After a final clean-up, including filing the ends of the locating rods flush and removal of the temporary strips if this has not been done after fitting the permanent cross-members, the driving wheels and axles can be tried in the frames. If the axles are a bit too tight in the bearings, try putting a drill, point first, in the drill chuck and reaming the holes out, using a spot of metal-polish on the drill shank. When placed on a really flat surface, all the wheels should sit down on the ground, but if not, do not despair, for many four-milly wheels are, I fear, supplied far from round and a test of these may prove that the bad workmanship is not yours but the wheelmakers.

Mounting Made Easy

(*Continued from page* 221)

toe of the hot iron. This prevents movement of the pattern when the final mounting is done.

The final stage is to fix permanently the pattern to the card. Take a piece of clean paper as a protection and lay over the pattern (now tacked to the card). With the iron at a temperature of about 150 to 180 deg. F., firmly but gently press the " sandwich " all over. When this has been done and the work allowed to cool for a second or two you will find that you have a perfectly mounted pattern which can be trimmed as required.

One or two points need mentioning at this stage. All the materials used, including the protecting paper, must be reasonably dry, which is easily ensured by holding them in front of the fire for a brief time.

As stated previously, the best iron temperature is about 150 to 180 deg. F. and this can soon be gauged with a little experience. If the iron is too hot the tissue will tend to stick to the cardboard and leave the pattern, and if too cool the tissue will not adhere to the card.

Should you be making up one of the many printed model sheets that have tabs for assembly you will, of course, not mount your cardboard over the tabs. If the pattern is shaped (a gable end to a roof, for instance) it will be necessary to cut the mounting board and tissue to shape before fixing.

When a little experience has been gained with this method of mounting you will definitely find it quicker, cleaner and more certain than other methods. Incidentally, dry mounting tissue is obtainable at all photographic dealers in sizes from about $6\frac{1}{2}$ in. × $4\frac{3}{4}$ in. upwards, and any size pattern can be covered if necessary by using pieces of tissue side by side.

ADDITIONS to the range of K's castings can be seen on this page. The standard that K's set themselves a few months ago when they introduced the first castings from their machines has been maintained. Edges and rivets are nice and clean, and the leaf springs are excellent. There is a remarkably small amount of flash; with the exception of the L.N.W.R. signal arm and post, none of the pieces illustrated has felt a file. K's provide an interesting service in connection with castings. Customers' patterns will be considered for casting, and special requirements catered for.

* * *

The late Mr. S. C. Eldridge, an Attorney at Law in Texas, collected a library of many rare and early books appertaining to his profession. We have been informed that three titles of particular interest to railwaymen are available for purchase now that the library is being dispersed. They are :

"American Railway Cases," Vols. 1 and 2. Published 1857.

"American and English Railway Cases," Vol. 1. Published 1881.

"Compilation of the Constitution and Laws Relating to Railways in Arkansas." Published 1883.

The price for each volume is 10 dollars.

We suggest that if anyone is interested they contact Miss Margaret Eldridge, 511, Shook Avenue, San Antonio 12, Texas, U.S.A.

* * *

THE TALYLLYN RAILWAY COMPANY have favoured us with a copy of their latest guide. Priced at 1s., it consists of 32 pages and covers. Photographs, map, description of route and some facts about the railway make up the larger part of the content. Details of accommodation available in the area will prove useful to those intending to visit this lovely spot in Wales.

A photographic competition is being held for photographs taken of the railway this year. The aim is to obtain new material for publicity work, so look for something new in your view finders. There are three classes: (A) B & W prints by non-members, (B) B & W prints by members, and an open section for 35 mm. transparencies. In each section the prize is two guineas. Entry forms are obtainable from R. K. Cope, "Brynglas," Beckman Road, Pedmore, Stourbridge, Worcs.

From the same source we have received a set of four drawings depicting locomotives of the Talyllyn Railway. These are *Talyllyn*, *Dolgoch*, *Sir Hadyn*, and *Edward Thomas*. Price 1s. each or 3s. 6d. a set, postage extra. Left side, both end elevations and plan are given and a scrap view of the right side is also shown. The drawings are reproduced to a scale of 7 mm. to 1 ft., and full-size dimensions are given. We feel that the reproduction leaves something to be desired; something that could possibly have been achieved by the use of a harder surfaced paper, even at a little extra cost to the purchaser, but as the drawings stand, they will be extremely interesting to all those whose concern is for the narrow gauge.

* * *

Quite recently we spent part of an afternoon immersed in the flickering twilight of a preview cinema in the centre of London's film-land. The purpose of our visit was to view the latest in the "Strange To Relate" series of short films made by PAUL BARRALET PRODUCTIONS LTD. Among the sequences appeared a number depicting the Snowdon rack and pinion railway and the R. H. & D. 15-in. gauge railway.

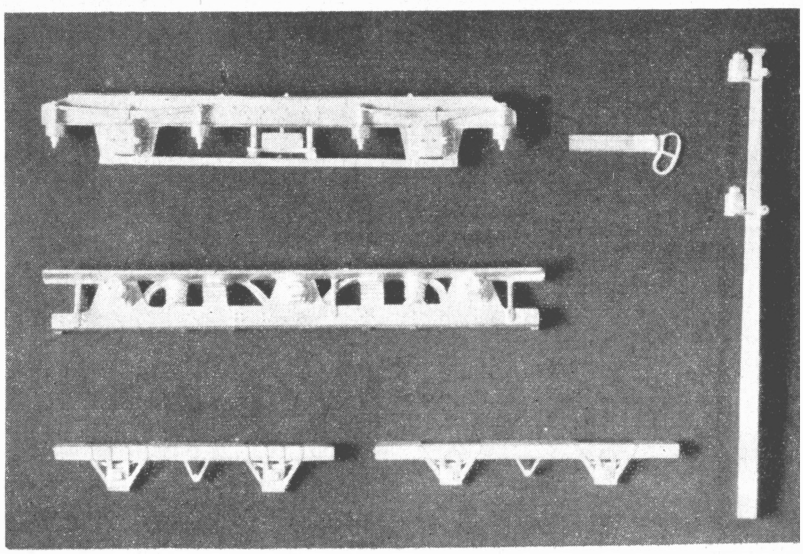
Whilst making this film, the possibilities that exist in the railway field, both prototype and model, were realised and now teams of technicians are out and about making a more direct approach to the subject. No need to wax upon the good effect such publicity can have.

The film we viewed will be released in the autumn and distributed through the J. Arthur Rank organisation.

* * *

There seems to be a steady increase in the number of exhibitions by the smaller clubs taking place in this country. Generally speaking, secretaries report that each one brings in new members; rather like shepherds gathering the lost stragglers. The effect of these exhibitions must surely be to spread the hobby and that can only result in benefit to everybody, since it will enable trade manufacturers to contemplate broader fields.

Another form of publicity that the efforts of model railway enthusiasts are receiving, although this time leaning more towards the engineering models, is that gained at garden fêtes, Parents' Days and similar functions. Each year we receive dozens of telephone calls from people, ranging from distraught Assistant Art Mistresses who have suddenly been honoured (?) with the post of model railway organisers, to fashionable ladies from famous Spas who are in charge of children at somebody's garden function. More often than not they are uncertain what it is they require, except that it must have wheels, puff smoke and keep children quiet; although, we do speak to some who think that railway modellers are a class unto themselves (perhaps they are, in some respects) and who are scattered throughout Great Britain, layouts packed, ready to dash anywhere at one day's notice with entertainment



The recent issue of K's castings that have caused such favourable comment

design to keep children from under their elders' feet. Be that as it may, we generally managed to put them into touch with the right people and a little more publicity for the hobby gets under way; but we sometimes wonder how the school mistress fared who had been instructed to find a railway modeller who would loan his layout to the school for a day, and permit its inmates to operate it. It was a girls' school !

* * *

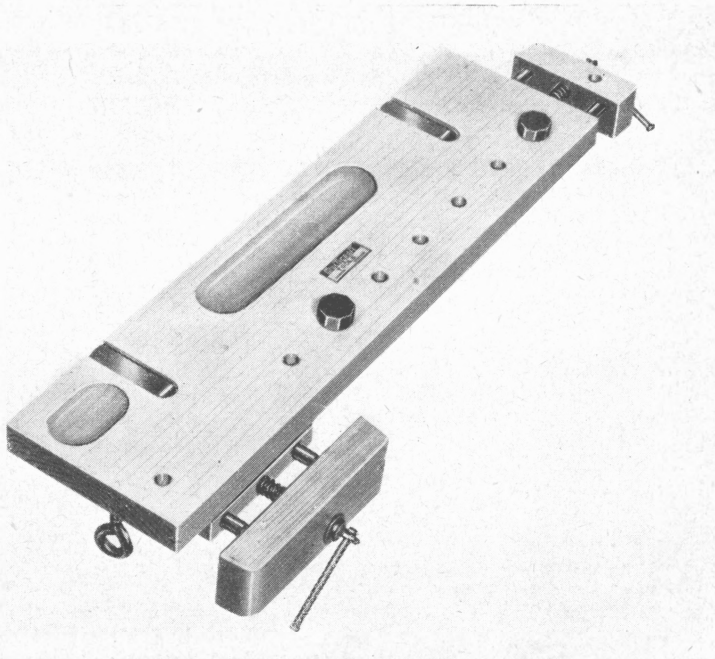
MULTICRAFT LIMITED of 406, Euston Road, London, N.W.1, have filled one of the gaps in modelling accessories. A Table Top Work Bench. What is more, they have kept the price as low as can be expected these days.—37s. 6d.

The 21 in. long bench is designed to clamp onto any thickness of table by means of two clamps. A series of holes extending the length of the working edge are made to receive pegs, thus providing stops at any distance apart. Two wells along the rear edge of the bench will ensure that small pieces of work, screws etc. may always be found. Two vices are provided. The wood used is Scandinavian dried beech, and for the price, a nice acquisition.

* * *

Australian production of Wolf Cub Home Constructor Portable Electric Tools has now commenced at the factory of WOLF ELECTRIC TOOLS (AUSTRALIA) PTY. LTD., in N.S.W.

Although at present the drills are being assembled largely from components shipped by the British operating company, Wolf Electric Tools Ltd., Pioneer Works, Hanger Lane, London, W.5, use is already being made of the products of Australian industry. It is anticipated that the use of Australian components will increase rapidly until in due course the Cub drill will be of 100 per cent. Australian manufacture.

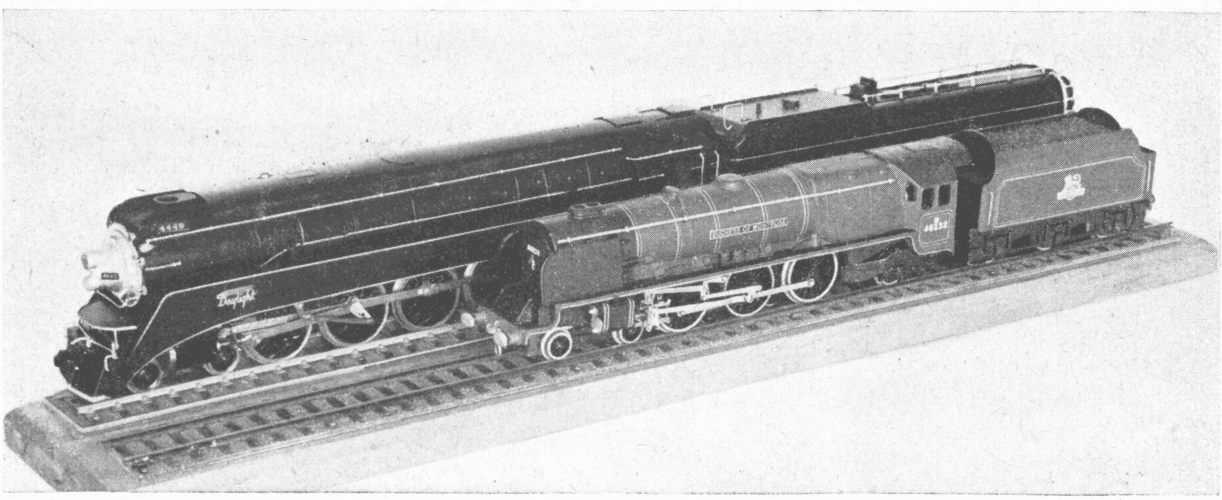


Latest addition to the Multicraft range of hobby tools and accessories

CHERRY'S (SURREY) LTD., of Richmond, recently produced to the order of Mr. W. H. Arno of Walthamstow a 4 mm. scale super-detailed model of an American Southern Pacific Class GS.4 4-8-4 engine and tender, No. 4449 *Daylight*.

The model, accurately produced to Messrs. Cherry's usual high standard, was constructed mainly of nickel-silver. The superstructure, because of the many varying contours involved, presented some problems requiring the use of electric arc and oxy-gas equipment in the soldering processes. The typical American driving wheels were hand fabricated. The complicated shape of the tender also called for a great deal of painstaking work—the two six-wheeled bogies particularly carrying much non-standard "machinery." Power is provided through a Romford motor unit. The locomotive is finished in black with orange lining, silver smoke-box front, and white lettering.

An indication of the tremendous difference in size between British and American express type engine is illustrated in the photograph which shows a Dublo "Duchess" locomotive standing beside the Southern Pacific model to the same scale.



A comparison between an American 4-8-4 and a British Pacific in the same scale

The Thin End of the Wedge

By R. K. Battson

LONG ago, when I was more prosperous than I am now and lived in a larger house, I had an attractive "O" gauge layout which I loved dearly for the pleasure it gave. For one reason and another, it had to go, together with a good many other things, and today I live in a minute flat, where no sort of permanent layout in any scale is remotely possible because I cannot persuade my wife that ownership of a small railway in the living room would be adequate compensation for spending all her waking life in the kitchenette. Recently, this has been preying on my mind to such an extent that I have evolved what must be the world's smallest "OO" gauge layout. It measures precisely 3 ft. by 6 in. and although I say it, who perhaps should not, the general concensus of opinion is that it is rather pleasing.

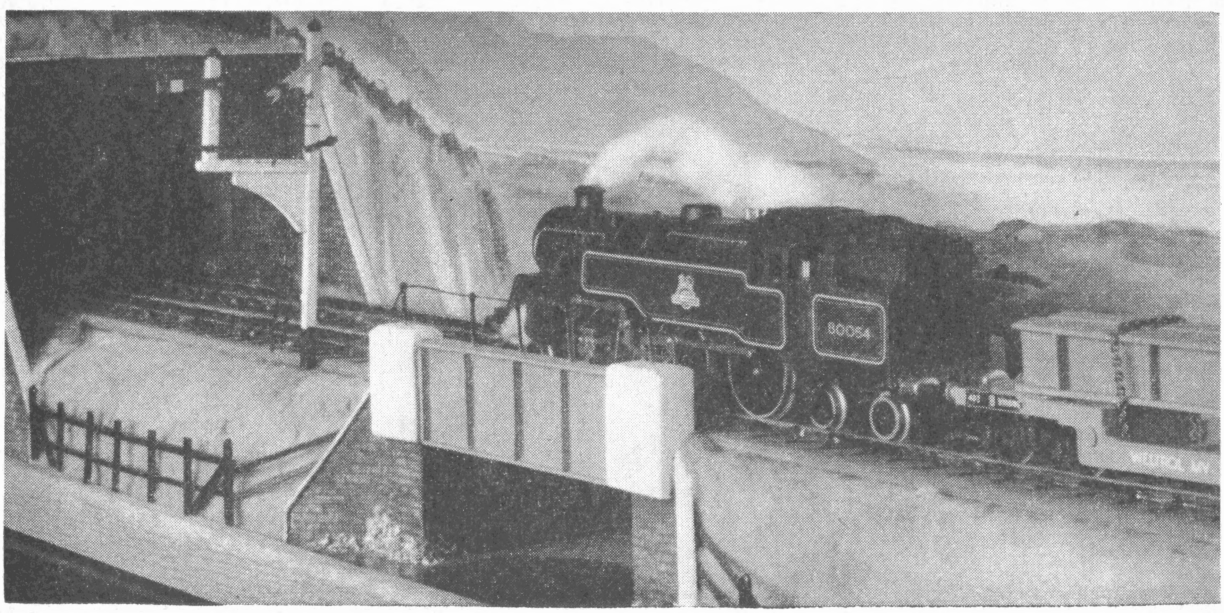
In this somewhat limited area, there is an embankment carrying a yard of double track, a plate girder bridge spanning a small stream, two tunnel mouths with wing walls, one bracket signal, one single-arm signal, some fencing, one locomotive, four goods wagons and an impressive vista of landlocked water; which is not bad for an area of $1\frac{1}{2}$ sq. ft.

The Track

Of course, no running is possible, so I have used plain track soldered to tin sleepers, 75 to the yard, laid on hardboard strips darkened down to represent ballast and which looks very well. The signals and plate girder bridge are of wood, cardboard and wire. The embankment is of wood covered with medical lint water-coloured in green and brown. The tunnel mouths are stopped off about $1\frac{1}{2}$ in. deep, all brick-marking being scored into the cardboard, and mottled with poster colours.

The locomotive is a Hornby Dublo 2-6-4T. I have removed the front coupler, added leading and cab steps, and when I can get around to it, I may substitute scale bogie and pony-truck wheels, but it is a beautiful engine as it is. With the exception of a high-sided wagon of my own manufacture, all the vehicles are Hornby Dublo, slightly modified.

The whole affair is, admittedly, static, but then, so is any model railway for about 90 per cent. of its existence. However, it is extraordinarily comforting to look at. A new setting can be had every week by painting a different backdrop and then, one can make a new baseboard, say, 18 in. wide, and introduce some sidings. After that, perhaps a small extension-piece of some sort . . . and, before she knows where she is, my wife will find herself in the kitchenette after all. . . .



A part of the small "OO" gauge static layout, measuring 3 ft. 6 in. in length

EDITOR'S MAILBAG

● **Letters of general interest are welcomed. A nom de plume may be used if desired, but the name and address of the sender must accompany the letter. The Editor does not accept responsibility for the views expressed by correspondents.**

"OOO" GAUGE

DEAR SIR,—I should like to inform your correspondent, G. P. Middleton, that the accepted gauge for 2 mm. scale is 9.5 mm. A large range of parts is available for this gauge, such as wheels, track, and even coach and wagon kits, at prices similar to those for "OO" items.

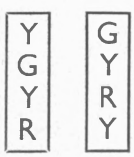
The only person I have heard of who uses 8 mm. gauge is G. H. Anson, writing in the MODEL RAILWAY NEWS. The disadvantage with this gauge is that it is continuing the 16.5/18 mm. gauge mix-up in 4 mm. scale into 2 mm. scale. In addition 8 mm. gauge leaves less room for motor parts between the frames. Incidentally, Mr. Anson has devised a way of making very nice track, but it is rather spoilt by the overscale rail and sleepers, which give it the appearance of 4 mm. scale narrow-gauge track.

In conclusion I should like to add the following: "OOO" wheel standards: back-to-back, 8.25 mm., flange depth, 0.75 mm., flange width, 0.5 mm., tread width, 1 mm.

Yours faithfully,
New Malden. J. M. WRIGHT.

COLOUR LIGHT SIGNALLING

DEAR SIR,— I am even younger in years than Mr. Capon, but I should like to point out that when correcting Mr. Hutt, he said that the four-aspect colour light signals on the Southern are (a).



(a) (b)

I live at Redhill, also on the Brighton line, just a few miles south of Mr. Capon, and where the colour-light signals are (b). The signals at Purley are indeed as Mr. Capon said. There appears, therefore, to be two orders in which the aspects can be seen, so that anyone modelling the Brighton line has a choice. More signals appear to me to be (b) than (a).

Yours faithfully,
Redhill. IAN J. BRACKEN.

DEAR SIR,—With reference to Mr. Capon's letter (MODEL RAILWAY NEWS, May, 1956), I would like to point out that though I am well aware how the Southern arrange their four-aspect signals, this is by no means the only method in use at the present time.

If he were to take a visit to the Eastern Region at Liverpool Street, Mr. Capon would find that all the four-aspect signals on that section of main line have the aspects arranged as shown in my original diagram.

Incidentally, this brings out a point which I think cannot be overstressed; if one is modelling to a prototype it pays to check on details, even on items such as colour light signals. Though these would appear to be standardised, considerable variation does, in fact, exist between regions and even within each region (due largely to the designs of the particular manufacturer). Details to watch include arrangement of aspects, size and shape of display boards, method of fixing to pipe post or gantry, position and shape of number plates, etc., length of hoods and provision of back lights to mention only a few.

Many people run away with the idea that the modernisation of signals (and other things) has destroyed the interesting variety found in mechanical signals. I, for one, think that the variety still exists if one knows what to look for.

Yours faithfully,
Chippenham. R. T. HUTT.

"FROG" OR "VEE"

DEAR SIR,—I read with great interest the letter from the full size railway engineer in your April issue and whilst I, as a "full size" model enthusiast of quite a few years' standing, agree with him that the average modeller would do well to study actual practice, I have a few words of criticism to make.

My brother has been a signalman for 30 years and he agrees with me that the common name for the "vee" on a turnout is a "frog" and is of the opinion that the platelayers of his acquaintance would be bewildered by any other term.

With regard to accurate track I have also seen full size stretches of track which forcibly remind me of my small son's tinplate track laid with no clips!

Yours faithfully,
Basildon. A. V. KING.

A FIRELESS STEAM LOCOMOTIVE

DEAR SIR,—In view of your recent article on "Fireless Steam Locomotives," I am enclosing a photograph of the one we use at Lancaster Generating Station of the Central Electricity Authority, together with the relevant particulars, which are:

0-6-0 fireless locomotive "Lancaster."

Built 1917 by A. Barclay of Kilmarnock.

Works number 1572.

Cylinders: Bore 14½ in., stroke 18 in.

Wheels: Diameter 3 ft., wheelbase 7 ft. 3 in.

Max. working pressure 150 p.s.i.

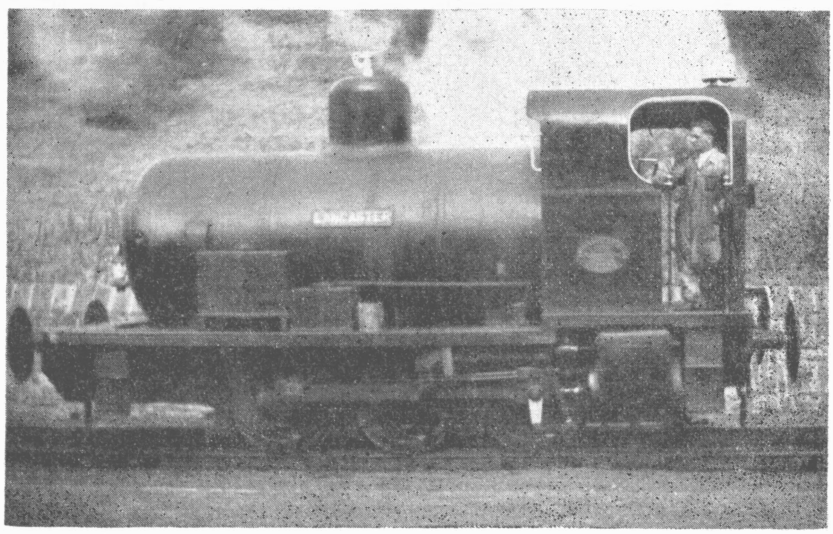
Length overall: 20 ft. 11½ in., originally, prior to fitting spring buffers in place of wooden blocks.

Weight: 26 tons 10¼ cwt. with water level just above centre of gauge glass.

Working at Lancaster Power Station.

There is another one, very similar in appearance, at Willowholne Power Station, Carlisle, which we borrow when ours is under overhaul. Others work on the oil installations on the Liverpool Docks (South Docks).

Yours faithfully,
Lancaster. RICHARD W. CRAFTER.



L.M.S. COMMERCIAL MODEL LOCOMOTIVES

DEAR SIR,—As an ardent supporter of the L.M.S., both prototype and model, I was naturally pleased to discover, on looking through my collection of catalogues, just how many locomotives are now available, commercially, to those whose interests centre around the best of the old groups.

For the benefit of newcomers to the hobby, I have compiled what I believe to be a complete list (excluding diesels) of these models.

4-4-0	2P	K.M.R.	Casting*
4-4-0	4P Compound	,,	,, *
0-6-0	4F Fowler	Essar	,,
4-6-0	5P 5F	Farish	,, *
4-6-2	7P *Duchess*	Hornby	,,
4-6-2	,,	Rowell	,, *
4-6-2	7P Princess slightly underscale	Tri-ang	Plastic moulding
0-6-0T	3F	,,	,,
4-6-2	7P *Duchess*	Hamblings	complete brass superstructure
4-6-0	5P 5F	,,	complete brass superstructure
4-6-0	5XP	,,	complete brass superstructure
4-6-0	5XP	Jamieson	N.S. kit
4-6-0	5P 5F	,,	,,
4-6-0	6P *Royal Scot*	,,	,,
4-6-0	6P Rebuilt "Scot"	Hamblings	complete superstructure
4-4-0	4P Compound	,,	complete superstructure
4-4-0	4P Compound	Jamieson	Kit
0-6-0	4F Fowler	,,	,,
0-4-4T	Caledonian?	,,	,,

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Locomotives marked with an asterisk are now only available secondhand.

In addition to the above, the following are available:

0-6-0T	Essar	Casting	
0-4-0ST	,,	,,	(Gnat)
0-6-0T	Jamieson	Kit	
0-4-0T	,,	,,	

These are free-lance locomotives but they bear a strong resemblance to L.M.S. design and are easily adapted as such. The Rev. Ed. Beal's book, "Modelling Locomotives," deals very fully with the subject of utilising castings.

You will note that I am uncertain as to what engine the Jamieson 0-4-4T represents. I will be grateful if anyone can enlighten me on this subject.

I sincerely hope that this list, which was prompted by that of "Merlin" in the March issue, will prove of interest to readers.

Yours faithfully,

Gloucester. J. N. BRAMWELL.

LONDON UNITED TRAMWAYS

DEAR SIR,—I have read the recent article by R. E. Tustin and the letter from John Rourke with great interest and wish we could have a small regular tramways feature in your excellent magazine.

The following notes will, I am sure, clear up several points in the articles already published: Car No. 205—this was originally one of the W class open tops which were latterly converted to covered top deck on the scrapping of the Type Y, when several of the tops from the scrapped cars were used for a second time. So, virtually, 205 may be considered a hybrid.

The Y tops were somewhat narrower than the U tops and could always be quickly distinguished by the advertisement panel at the side which was three-quarters advertisement and one-quarter white paint against equal proportions on the U class. There were 101 conversions to covered tops—65 standard Type Y and 35 standard Type U together with Car No. 27 which was a non-standard job (possibly the prototype).

Turning to the windows mentioned by Mr. Rourke, these were never to my knowledge hinged, but were a single piece of glass with a stained glass advertisement tightly fixed inside. This stained glass seemed somehow to mark the window glass, as for many years one could still see a tracing of the original advertisement on the window, even under a paper advertisement stuck on, or more easily on plain windows.

The livery of the London United was always in the latter days red with yellow lining—the yellow lining having a fine black line on the outside of the panel and a white one on the inside. Numbers at this stage were gold, lined out in white with black shading. In the early days when very large numbers were used, they were shaded with red on the blue cars and with blue on the red cars. At one time there were many varieties with cars running with different types of numbers on the same car. I have some interesting photographs of these cars in my possession.

Yours faithfully,

Acton. M. N. A. WALKER.

OLD G.W. ROYAL COACHES

DEAR SIR,—What, I wonder, is the provenance of the old clerestory G.W. saloon which is serving as some kind of store or canteen at Crediton Station, Devon, and appears to be numbered W.9029? It is in rather a dilapidated condition but looks as if it had seen better days.

Yours faithfully,

London, S.W.1. HENRY MAXWELL.

DOWN IN THE FOREST SOMETHING IS STIRRING

DEAR SIR,—Encouraged by the efforts of other "minority" groups in The Hobby, the clockwork-addict—normally a retiring, quiet-mannered animal—is rearing its head and wants to know "What about me?" Its voice is getting more and more persistent, and it won't be put off.

Mere grumbling will not get us anywhere, so let's face facts and see if something constructive cannot be done for those who see in clockwork the ideal form of motive-power for their railway. One firm after another has abandoned clockwork since the war, until now we are left with an extremely limited choice, and when these firms are tackled they answer "There is no demand." Well—they are not in business for the sake of their health, and it is unreasonable to expect them to waste money on an unsaleable product, so it is up to us to convince the trade that gauge "O" clockwork is NOT a dead duck. If we are to do this, we must put up a good case, and I am suggesting a way of doing this.

I am inviting all standard gauge "O" modellers who are at all interested in clockwork locos to write to me, briefly giving details of what sort of engine they would be prepared to buy, supposing the trade offered to produce ONE really presentable clockwork loco. I will undertake to summarise all the answers received—provided they are sufficiently encouraging—and make a full report to the trade. It is even possible that this might be done through the newly-formed Gauge "O" Guild.

My own suggestion—merely as a guide—is that possibly the most universally acceptable engine would be a tank engine with a controlled mechanism, sufficiently large to haul goods or branch-line passenger trains, yet not too large for shunting. This would make it a proposition for electric layouts as well as clockwork. I am aware that until recently, such a loco has in fact been on the market, but it was so unlike any known prototype in outline that its very appearance was against it.

So come on, everybody—let's see just what the feeling is on this subject—and I will do the paper-work. Write to me at 8, Adelaide Road, Ipswich, Suffolk. There's no harm in trying, is there?

Yours faithfully,

Ipswich. JOHN L. RAY
(Crewchester Model Railway).

WITH THE CLUBS

THE NORTH MIDDLESEX MODEL RAILWAY CLUB

Over the past six months the club has had a very successful time. Several new members have been enrolled, outings to railway installations have been well attended; our own exhibition in May was a real success.

In October the club layout will be on show for a week at an exhibition organised by the Wood Green Borough Council. This is the first time we have attempted to exhibit outside our headquarters, but members are keen to publicise the hobby and we naturally hope to enrol even more members.

Outings to further locomotive sheds are scheduled after the holiday period is over.

The club meets every Wednesday at Lacey Hall, Hazelwood Lane, Palmers Green, N.13, at 7.30 p.m.

Further particulars of this "OO" gauge group may be had from R. A. MILLS, 37, Compton Road, London, N.21.

THE RAILWAY ENTHUSIASTS' CLUB, FARNBOROUGH

The next rail tour in the club's programme is on Sunday, September 30th, when a special train hauled by a class "D.16/3" locomotive on the main line sections, and by a class "J.15" 0-6-0 on the branch lines, will cover the following route: Liverpool Street (dep. 9.30 a.m. approx.)-Colchester-Bentley-Hadleigh Branch (closed)-Snape Goods Branch-Beccles to Tivetshall (closed)-Mellis to Eye (closed), returning to Liverpool Street via Haughley and Cambridge. Non-members will be welcome, accommodation permitting.

Recent activities have included visits to the three signal boxes at St. Pancras Station (where the small tunnel box attracted most interest); visits to Southern Region boxes at Basingstoke and Ascot; and a week's tour of mineral lines in Cornwall—this latter event interested the local railwaymen almost as much as it appealed to the members. A second week's visit is to be paid in August.

Other forthcoming fixtures include a visit to the Greywood Central Railway at Walton-on-Thames; a study tour of the Somerset and Dorset line on a summer Saturday; a tour of the Bowaters narrow gauge railway system at Sittingbourne, Kent (September 7th); a visit to industrial lines in the Banbury and Oxford area (September 15th); and a visit to Lillie Bridge Works of London Transport.

The club's headquarters at Farnborough are being improved and renovated in preparation for the coming indoor season, and a considerable increase has been made in the size of the reference library. A Road Locomotives Records officer has been appointed: he is B. E. Hillsdon, of "Tantivy," Fore Street, Dulverton, Somerset. The photographic records are being expanded and are available for reference by members at the clubrooms or by post.

Further details of the East Anglian tour, the other future events and of membership are available from the Hon. Secretary: H. DAVIES, Lynmouth, Sycamore Road, Farnborough, Hants. A stamped addressed envelope will be appreciated.

THE BOURNEMOUTH MODEL RAILWAY SOCIETY

The first meeting of the Bournemouth Model Railway Society will be held at 7 p.m. on Friday, August 31st, 1956. The constitution of the society and the winter programme will be discussed and officers will be elected for the committee. Will those who wish to attend this meeting please inform D. YULE, 23, Elmsway, Southbourne, Bournemouth. Tel.: Southbourne 47728.

FALMOUTH MODEL RAILWAY CLUB

The club will be holding an exhibition of members' work during the week August 27th to September 1st, at the Women's Institute, Webber Street, Falmouth.

LEICESTER MODEL RAILWAY GROUP

The next meeting will be held in the hall of the Church of the Martyrs, Westcotes Drive, Leicester, at 7.30 p.m. on Thursday, August 23rd, 1956, when a talk on "The railways of Bristol" (illustrated) will be given by Mr. John Stevens of the Bristol Railway Circle.

Hon. Secretary: B. F. CLAYTON, 13, Bramcote Road, Wigston Fields, Leicester.

BOLTON MODEL RAILWAY CIRCLE

A meeting of the Bolton Model Railway Circle will be held on August 1st, 1956, at 39, Rowena Street, Bolton.

Hon. Secretary: J. HULOCK, 70, Lonsdale Road, Bolton.

WEYMOUTH & DISTRICT MODEL ENGINEERING SOCIETY

As in past years the society is holding its usual Exhibition of Models from August 14th-18th at the Melcombe Regis Boys School (by Westham Bridge). The exhibition will be open every day from 11 a.m. to 9 p.m.

There will be models of locomotives, ships and aircraft, and a free ride for the children behind the club's locomotive on the club's track.

The club's own "OO" 2-rail layout will be in operation every day, also layouts using Hornby Dublo and Tri-ang stock. British Railways will be showing some of their latest models, with the usual push buttons for young and old to enjoy.

Anyone visiting Weymouth will be made welcome, and if you cannot make it for the exhibition, why not get in touch with us by calling on the Hon. Secretary: H. SWINDELL, 27, Leamington Road, Weymouth.

CLUB FOR AMERICAN RAILWAY ENTHUSIASTS

A number of enthusiasts in the South London area are attempting the formation of a club especially for modellers in "HO" gauge of American prototypes. It is intended to construct a fair sized layout on which to operate train services in the correct manner. There is already a good nucleus of members with which to make a start. The probable site of the H.Q. will be in the Shortlands-Bromley (Kent) area, but this is subject to accommodation difficulties.

Anyone interested is asked to contact M. J. SPELLAN at 81, Tedder Road, Selsdon, South Croydon, Surrey.

NARROW GAUGE RAILWAY SOCIETY (LONDON AND SOUTH EAST AREA)

Advance notice is given that the society's main A.G.M. will be held in London this year at the Kingsley Hotel, Bloomsbury, on December 3rd, a Saturday. Visitors will be welcome to the evening film show (title to be announced later) which will start at 6.30.

Further details and any other inquiries should be addressed to: C. H JOHN, 5, Lavington Road, West Ealing, London, W.13.

TWO-O'S MODEL RAILWAY CLUB

At the second A.G.M. of the Two-Os Model Railway Club, H. Sydney Cox was re-elected secretary and Peter H. Ranson as treasurer. The chairman expressed the need for bigger premises as soon as possible. Exactly 14 days after the A.G.M., members of the club went along to an address in Hither Green Lane to view a room over a garage. At present we are meeting every Wednesday evening to generally clean and redecorate our new club room.

The club welcomes enquiries from readers and any interested need not feel that there is any obligation. Such people should write to BM/HMSL, London, W.C.1. We are affiliated to the Association of Model Railway Clubs.

TRAMWAY AND LIGHT RAILWAY SOCIETY

Members of the Tramway and Light Railway Society are exhibiting their models at the society's exhibition to be held on August 18th in the Fred Tallant Hall, Drummond Street, Euston, N.W.1.

The exhibition will include working model trams and displays of photographs, drawings, maps, guides and tickets. Doors open at 3.0 p.m. and will remain so until 9.0 p.m.

AN EXHIBITION AT STRETFORD

A model railway exhibition is now open in the Longford Hall Art Gallery, Stretford, near Manchester, until August 19th.

There are working models shown by the Manchester Model Railway Society, British Railways and the Metropolitan-Vickers Electrical Company. Also taking part are the Stephenson Locomotive Society, the Manchester Locomotive Society, the Talyllyn Railway Preservation Society and the Festiniog Railway Society, who are showing a great variety of exhibits.

The exhibition is sponsored by the corporation.

TRANSPORTATION CENTRE, R.E.

In the past the Transportation Centre, Royal Engineers has held a Public Day at Longmoor, usually on the first Saturday in September. This year, it is being held at Marchwood near Southampton on Saturday, September 1st, 1956.

Displays and demonstrations will mainly cover the Port Operating and Inland Water Transport sides of the Centre's activities and will include trips on various craft in Southampton Water. There will also be some representation of the railway activities including rides on locomotive footplates. There are many other attractions and the band of the Corps of Royal Engineers will play during the afternoon.

Public Day starts 1.30 p.m. and ends 7 p.m.

Cheap day return tickets will be available from many stations in Southern England and a frequent ferry service will be available between the Town Quay, Southampton, and Marchwood. It is also hoped to encourage local bus services to run frequent services to this point. Proceeds from the sale of programmes and for certain events in which a small charge will be made will go to the Royal Engineers Benevolent Fund.

WILLESDEN & WEST LONDON S.M.E.

The society has obtained the use of a larger room. While "live steam" is the predominant activity of members, it is desired to extend interest to the many other branches of model work, and with this in mind it has been decided to devote a part of our new home to the development of a "OO" gauge layout. We extend a very hearty welcome to anyone in our district who is interested in assisting in the planning and construction of this new venture and invite them to visit us at St. Judes, Lancefield Street, W.10, or write to Hon. Secretary: J. COUSINS, 39, Card Street, Paddington, W.10.

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The Sports Depot (Manchester) Ltd. for bargains in new and second-hand model railway locos and accessories. RIVAROSSI locos and rolling stock, condition as new, to be sold at approx. half price whilst stock lasts. Hornby "OO" tank loco, 35s. B.R. 2-6-4 tank loco, 50s. "Duchess of Atholl" 50s. B.R. tank loco converted 2-rail 2-6-4 £4 5s. Lines, 2s. 3d. ea. Points, 7s. 6d. ea. Electric, 12s. 6d. ea. with switch 15s. Trucks from 3s. 6d. ea. TRIX rails, 1s. ea. "Diesel Flyer" £5. American Switcher loco. and tender, 45s., trucks from 3s. 6d. ea. GAUGE "O" L.M.C. 4-4-0 loco, £4 10s. B.R. coaches, 25s. ea. Hornby clk. rails, 4d. ea., points, 2s. 6d. ea. Electric rails 9d. ea., points 4s. 6d. ea. Engine sheds, 25s. ea. Postage extra. WE PURCHASE second-hand locos and accessories. Golf clubs and all sport equipment. Send your goods for disposal on to us for quotation.—4/10, Princess Road, Moss Side, Manchester, 14. Tel. MOS. 1757.

Staffordshire Model Shop since 1936. Model railwaymen always welcome. New "OO" layout.—J. W. BAGNALL, South Walls Road, Stafford. Tel.: 420. M.E.T.A.

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"OO" 10½ Gauge. All types of models bought, sold and part exchanged. Lists/stamp.—MODELS (CITY) LTD., 2, The Arcade, E.C.2. Avenue 5759.

American Publications. "Model Railroad Track & Layout," 15s. 9d. "Steam Locomotives," 8s.; "Build your own Model Cars and Locos," 8s.; Frank Ellison on Model Railroads, 15s. 9d. Year's subscription "Model Railroader," 39s. Back numbers, 3s. 6d. (after June, 1952, 4s. 6d.). Catalogue free.—WILLEN LTD., (Dept. 42), 9, Drapers Gardens, London, E.C.2.

Birmingham—Bearwood Models for scale equipment—everything for the modeller. Wanted. Obsolete loco building kits; Zenith motors: scale models "O" and "OO."—53 Parade, Birmingham, 1, and 8, Three Shires, Oak Road, Smethwick, 41.

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"OO" Track 3-Rail, straight, curved points. Surplus to requirements.—FLETCHER, Wormit, Fife.

Yeovil Railway Modellers invited to call. Tri-ang service agents. Peco, Trix, Rivarossi. Mail orders.—HINKS FOR RADIO, 36, Middle Street, Yeovil.

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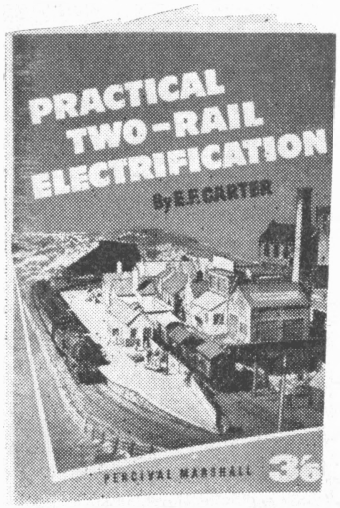

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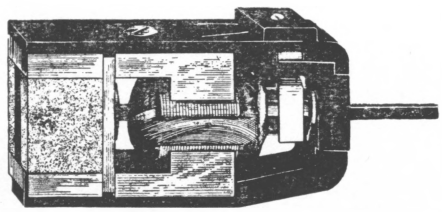

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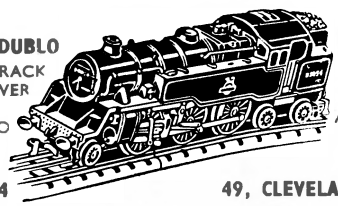

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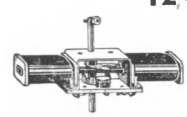

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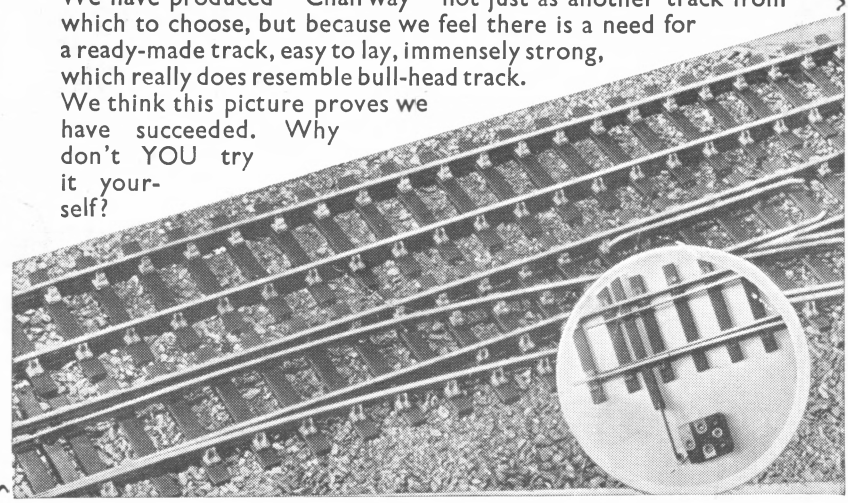

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